THE ARCHAEOLOGY OF FISH HAUL CREEK HILTON HEAD ISLAND, BEAUFORT COUNTY, SOUTH CAROLINA: A PRELIMINARY STATEMENT AND RECOMMENDATIONS

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THE CHARLESTON MUSEUM

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by

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The Charleston Museum
360 Meeting Street
Charleston, South Carolina

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What draws
singular lives together in the first place,
loneliness, lust, ambition,

or mere convenience, is obvious, why they drop
or murder one another
clear enough: how they create, though, a common
world
between them, like Bombelli's

impossible yet useful numbers, no one
has yet explained. Still, they do
manage to forgive impossible behavior,
to endure by some miracle

conversational tics and larval habits
without wincing. . .

The ogre will come in any case:
so Joyce has warned us. Howbeit,
fasting or feasting, we both know this: without
the Spirit we die, but life

without the Letter is in the worst of taste,
and always, through truth and love
can never really differ, when they seem to,
the subaltern should be truth.

- W. H. Auden, "The Common Life"

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ACKNOWLEDGEMENTS

The site discussed in this report was first brought to the attention of professional archaeologists by Mr. Jerre Wekhorst and is situated on the property of Mr. John Crago. We are indebted to both of these individuals, not only for their concern for South Carolina's archaeological heritage, but also for their interest in our work, enthusiasm, and willingness to help at all stages of the work reported in this manuscript.

We also wich to thank Ms. Trisha Logan for her interest and dedication. The hospitality of John and Joanne Goldsborough is greatly appreciated. In addition a multitude of volunteers assisted us; all were enthusiastic and good-natured. Without their help we would know much less about the site than we do.

The faunal analysis was conducted by Dr. Betsy Reitz, University of Georgia, and the seasonality dating of the shellfish was conducted by Dr. Cheryl Claassen, University of Cincinnati. We greatly appreciate these professional courtesies.

INTRODUCTION

Background

In May 1982 a potentially significant prehistoric archaeological site was identified on the northern end of Hilton Head Island by developer John Crago and his foreman, Jerre Wekhorst. This site, situated on the north edge of the Coggin and Fish Haul Creek marsh, was uncovered during the early stages of road construction in the Fish Haul subdivision (Baygall area of Hilton Head Island). Wekhorst collected abundant pottery as the work continued in the subdivision and took a small sample to the Charleston Museum, where we examined it for the first time in early June. This collection was notable not only for the mix of pottery (both Early and Middle Woodland period sherds were present), but also for the large size of the Early Woodland sherds.

When Weckhorst was contacted we discovered that not only were he and Crago tolerant of archaeological investigation in the subdivision, but actually welcomed professional interest in the site. Our research interests were explained and we received permission to conduct test excavations at the site in late July 1982. While money was not available to fund this testing program, Wekhorst was able to provide abundant volunteers and Crago provided a backhoe for our use. Work was conducted at the site from July 24 through July 26, with a total of 96 man hours spent by a crew of from four to eight individuals. Three 10-foot squares and two 5-foot squares were excavated to sterile soil. Two features were removed and several more were plotted but were not excavated because of time limitations.

Environment

The environmental conditions of the Hilton Head vicinity are described in detail by Trinkley (1981), Michie (1980), Mathews et al. (1980), and Sandifer et al. (1980). Hilton Head is a Beaufort County sea island situated south of the Port Royal Sound, north-northeast of Daufuskie Island and Calibogue Sound, and west of Skull Creek and Pinckney Island. The island is about 18.5 km in length and 10.9 km in width. Hilton Head has a Pleistocene core with a Holocene beach ridge fringe.

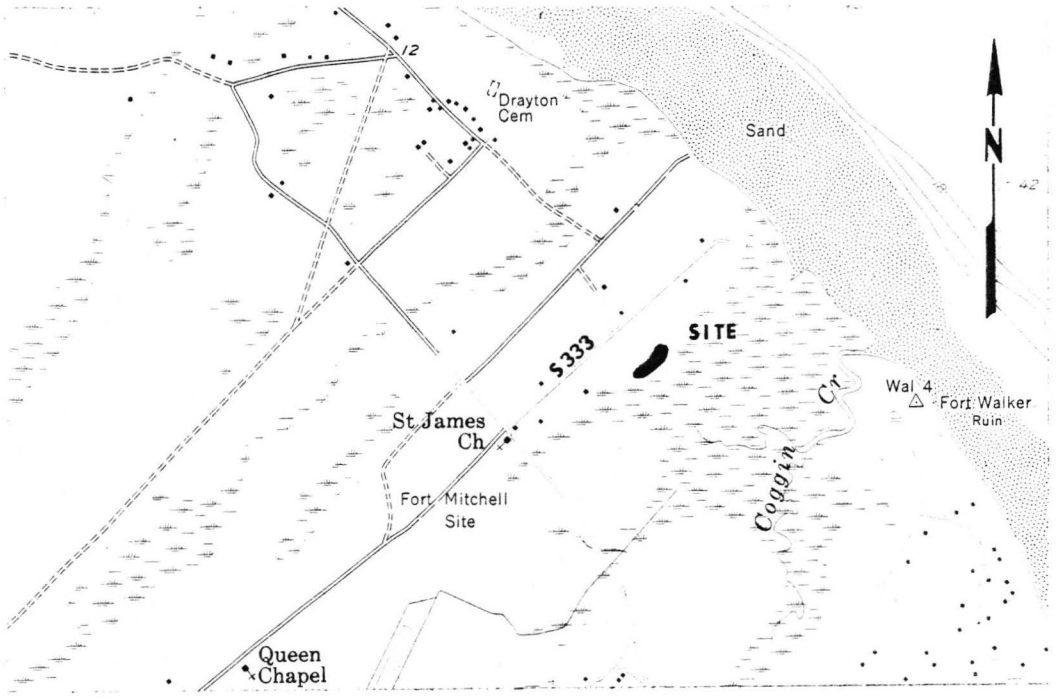
Mathews et al. (1980:155) note that "[a] maritime forest community modified by development is present on the island, along with many small freshwater depressions and bays located between remnant beach or dune ridges." This maritime ecosystem is defined most simply as all upland areas located on barrier islands, limited on the ocean side by the extreme high spring tide mark and on the mainland side by tidal marshes. This ecosystem is further broken into four subsystems by Sandifer et al. (1980:108-109). Only one of these, the maritime forest subsystem was of probable importance to prehistoric occupants. On

Hilton Head the maritime forest subsystem includes not only those species, such as live oaks and cabbage palmetto, tolerant of salt-spray, but also species, such as slash pine and saw palmetto, more typical of an interior upland forest (Sandifer et al. 1980:121). These forests, then, might have been somewhat more attractive to aboriginal man than the more typical maritime forests, which usually exhibit an impoverished mammalian fauna when compared to mainland habitats (Sandifer et al. 1980:154). Deer is the dominant species, although herd sizes are generally small. Other species include squirrel, marsh and Eastern cottontail rabbits, raccoon, and opossum. Sandifer et al.(1980:156) note that "[d]uring the early colonial period, a number of large predators including black bear, eastern cougar, gray wolf, and bobcat occupied the maritime forests of the coastal region." Adjacent ecological zones, such as the estuarine and freshwater ecosystems, make the barrier islands more attractive by providing considerable ecological variability within close proximity.

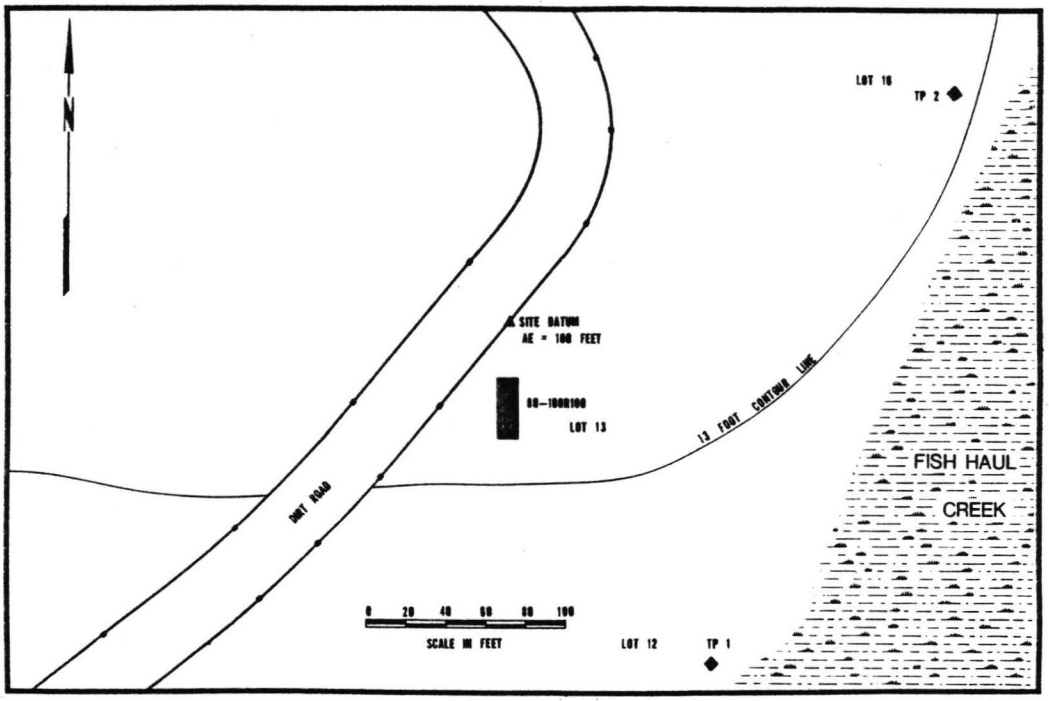
The esturine ecosystem "consists of deep-water tidal habitats and adjacent tidal wetlands" (Cowardin et al. 1977) of which the intertidal subsystem was probably the most important to the Indians. The vegetation in the salt marsh, where salinity ranges from 10 to as high as 70 ppt, is dominated by *Spartina* and *Juncus*, while the brackish marsh, with lower salinities, is characterized by giant cordgrass, cat-tails, and wild rice. Of major importance in this zone are the shellfish (primarily oyster and clam) and maritime fish. Fish such as flounder, drum, catfish, and gar represent large predators which are found at the mouths of intertidal creeks. These fish feed on the smaller species such as mumichog, spot, Atlantic menhaden, and silver perch, which commonly travel in schools and migrate in and out of intertidal creeks with the tide (Cain 1973:76-77). While few turtles are found in the estuarine areas, birds are fairly common, particularly in the area of emergent wetlands. Some of the birds, such as the ibis, found in the estuarine ecosystem are also found in the palustrine zone, while others, such as the clapper rail, are usually found only in tidal marshes. Although deer my graze in the high marsh, the only animals frequently found in the estuary are the marsh rabbit and raccoon (Sandifer et al. 1980:295).

There are several palustrine ecosystems in the vicinity of Fish Haul Creek; these areas are composed of extensively vegetated freshwater wetlands and often may seem to grade into the estuarine areas. The palustrine zone is dominated by oaks, sweetgums, cypress, and water tupelo with an abundant understory including swamp privet and wax myrtle (Sandifer et al. 1980:313). Open water areas may include plants such as giant cutgrass, wild rice, cat-tails, and sawgrass. This ecosystem attracts a variety of mammals also found in the maritime forest, including deer, opossum, and raccoon. In addition, the zone is an ideally suited habitat for birds (Sandifer et al. 1980:375), including the wood stork, egret, ibis, heron, and wood duck.

This brief review, as many before it (see Trinkley 1980:136-143), suggests that the Carolina coast was abundant in subsistence items. The Fish Haul Creek site is situated in an area of considerable environmental diversity. Within a one mile radius of the site approximately 25% of the



(a) Vicinity of Fish Haul Creek, taken from the USGS Hilton Head 7.5' topographic map, showing the Fish Haul Creek site.



(b) Plan view of the Fish Haul Creek site and the test units.

Figure 1. The Fish Haul Creek site.

area is dominated by either beach or the deep water of Port Royal Sound, 50% is estuarine, 40% is maritime forest, and 10% is palustrine. These percentages are maintained if the area considered is extended to cover a 2-mile radius, although it is probable that the prehistoric orientation excluded the beach and deep water of the Port Royal Sound. The environmental position of the Fish Haul Creek site is very similar to that of the Early Woodland Lighthouse Point and Stratton Place Shell Ring sites, which appear to have been located to maximize the availability of the terrestrial and estuarine resources (Trinkley 1980:156, 248) (see Figure 1).

Of considerable concern to archaeological reconstructions along the South Carolina coast is the position of sea level during the site's occupation. Recent work by Colquhoun et al. (1980) shows that while there is a general tendency for rising sea levels in the past 10,000 years, there have been a number of fluctuations. At about 2300 B.C. the sea level was ~~3.4 to 3.7~~ 10.4 feet below today's level, while by 1400 B.C. the sea had risen to a level about ~~1.0~~ 7.8 foot lower than present. This suggests that the estuarine creeks in the area today may have had a stepper gradient and, for part of their course, been fresh or brackish water rather than estuarine. There may also have been reduced estuarine areas in the immediate site vicinity. Recently Mark Brooks (personal communication) has been gathering evidence from a variety of archaeological and geological sites which supports the view that Early Woodland sites began to proliferate on the coast only after the sea level had risen sufficiently to create extensive tidal zones, probably about 1800 to 1500 B.C. Prior to that time it is probable that the coast exhibited few environmental zones which were not duplicated or surpassed by the inland swamp edge ecotones.

The Fish Haul Creek site is situated adjacent to the marsh on a sandy bank at an elevation of about 15 feet MSL. The topography is level with a steep drop to the marsh in most places. This bank, however, does not indicate any erosion and the site is well protected from severe weather. The soils, composed of excessively drained, rapidly permeable sands which have a deep water table, are classified as Wando fine sands. The typical Wando Series soils have an Ap horizon of dark brown sand up to 0.8 foot in thickness overlying a C horizon of brown to yellow loose, fine sand. Small concretions are common and the reaction of the soils is generally acidic (Stuck 1980:85). These are not soils conducive to good archaeological preservation because of their rapid leaching and acidic nature.

Historical Review

The first European groups to explore and settle the southern South Carolina coast were the Spanish in the sixteenth century. This area was first explored by Vasquez de Allyon in 1526, who attempted to establish a settlement in the area. The abortive colony is believed to have been in the vicinity of the South Santee River (Hoffman 1982). The Spanish made no further attempts at the establishment of a colony until spurred on by French attempts at colonization in the 1560s.

France sent Jean Ribault to the New World in search of appropriate

locations for Hugenot settlements. Ribault established his colony in 1562 on Paris Island, but, like the Spanish effort, this attempt failed. In 1564 Reve de Laudionnier established a new and larger French colony on the St. John's River, named Fort Caroline. A year later the settlement was destroyed by Pedro Menendez de Aviles, who founded the Spanish colony of St. Augustine. The massacre at Fort Caroline ended French attempts at colonization on the southeast Atlantic coast.

Spain, on the other hand, continued her colonization efforts in this area. A second outpost, Santa Elena, was established on Paris Island. During the sixteenth century the colony florished and was second only to St. Augustine in terms of Spanish influence (South 1979). Santa Elena faltered under the pressure of hostility from Indian groups and other European powers, however, and was abandoned by the Spanish in 1587. During the seventeenth century Spanish influence continued in the area through a chain of missions spreading up the Atlantic coast from St. Augustine.

English settlement of the New World began in the early seventeenth century. Charles Towne, the first permanent English settlement in South Carolina, was established in 1670 on the west bank of the Ashley River. The Carolina colony was part of the British mercantile system and was designed to profit the mother country by providing raw materials unavailable in England. The new colony was populated by English citizens, both directly from England and from British Caribbean colonies, principally Barbados, and directly by French Hugenot refugees. Black slaves, brought from the Caribbean colonies and from Africa, formed an important part of the colony's population (see Dunn 1972; Wood 1975; Zierden and Calhoun 1982).

Large blocks of land were granted to the new settlers according to a headright system, based on the number of family members. These early grants spread south of Charleston to the vicinity of Beaufort and Hilton Head Island. Hilton Head was granted to John Bayley in 1698 (Holmgren 1959:42). Settlers were encouraged to develop a profitable staple crop and experimented with a variety of cultigens. During the late seventeenth century the Carolina colony provided foodstuffs to the overcrowded, overspecialized Barbados colony. Deerskins, obtained through the Indian trade, were also an important export.

The fledgling colony's economy stablized in the early eighteenth century when rice was discovered to be a profitable staple. At the same time, Indian and Spanish threats had been contained to a point that settlement began to expand beyond the immediate vicinity of Charles Towne. The frontier settlement of Beaufort was established in 1710 and plantations began to develop in the Beaufort area. Hilton Head itself began to receive full time residents in the 1730s and 1740s. The expansion of rice agriculture in the Beaufort, Charleston, and Georgetown areas, and the development of the labor-intensive production methods associated with it, brought a marked increase in the importation of black slaves. The rice monoculture of the eighteenth century shaped the social, political, and economic systems which produced and perpetuated the coastal plantation system prior to the rise of cotton culture (Drucker and Anthony 1980:24-34). Although some rice was grown on Hilton

Head, the center of this rice monoculture was located above Charleston.

The American Revolution and the subsequent disruption of economic ties to England resulted in serious economic problems in Carolina during the late eighteenth century. By the early nineteenth century South Carolina's economy had begun to stablize as a shift to coastal rice culture and coastal cotton monoculture developed. New European markets for these products resulted in the expansion of the labor-intensive plantation system characteristic of the low country's economy until the end of the Civil War.

Reputedly, the first successful crop of the sea-island long staple cotton was grown on Hilton Head by William Elliott (Holmgren 1959:65). During the antebellum period, Hilton Head lands were owned principally by 15 families who developed large cotton-producing plantations. Among these plantations was Fish Haul, or Fish Hall, owned by the Drayton family. Although cotton was the principal crop of Fish Haul and the other Hilton Head plantations, other crops were produced to feed the owners and their slaves. The plantations of Hilton Head and adjacent islands prospered throughout the antebellum period and the population of the Hilton Head vicinity grew steadily. The bounteous lifestyle of Hilton Head plantation owners was brought to an abrupt halt, however, by the approaching Civil War.

A principal goal of the Union at the outbreak of the Civil War was the blockade of Confederate ports. The central port of Port Royal was chosen as the fleet base (Carse 1961:1). Port Royal's excellent harbor had been well known since the sixteenth century Spanish explorations. On October 29, 1861, the Union navy moved to seize the harbor and, despite the precautions of the Confederates, captured Fort Walker on Hilton Head Island.

During the war Hilton Head became the supply base for the southern blockade and the area around Fort Walker became nothing short of a sprawling suburb. Officers were housed in nearby plantation houses, while around Fort Walker hospitals, supply depots, barracks, and prisons were hastily constructed. In addition to the 23,000 troops eventually stationed at Hilton Head, the fort attracted numerous settlers and civilians who provided goods and services to the soldiers. Officers were also sent to the area to educate and control the legions of black slaves who migrated to the island during the disorienting war years. The town around Fort Walker was called Mitchellville after General Ormsby Mitchell, who died six weeks after being assigned this command (Holmgren 1959:102). Under the direction of the Union troops, the island blacks were cared for and were sent to maintain the island's cotton crops.

Following the Civil War, lands on Hilton Head and surrounding areas were subdivided into small plots and sold; very few antebellum plantation owners were able to reclaim their estates. Although the land sales were designed principally to make land available to the freedmen, much of the land was purchased by opportunistic northerners. Following the evacuation of Fort Walker the island's population was considerably reduced and the land was farmed in small tracts. The profits from cotton production declined steadily. Other economic activities of the late

nineteenth century included fishing and shellfish harvesting, and, briefly, phosphate mining.

The twentieth century witnessed a population migration, principally among the area's blacks, to northern cities in search of lucrative employment. In recent years the island has witnesses another population movement, as real estate developments have created a residential resort for upper-middle class citizens. Former residents of Hilton Head are being replaced by those able to affort homes in carefully-planned developments.

Research Orientation

Sufficient archaeology has been conducted on the South Carolina coastal plain to construct an archaeological synthesis that approximates reality. The *Paleo-Indian Period*, lasting from 15,000 to 8000 B.C., is evidenced by scattered finds of basally thinned, side-notched projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Williams 1968; Michie 1977). The Paleo-Indian occupation, although widespread, does not appear to have been intensive. Sites are most frequently found along the major river drainages, which Michie (1977:124) suggests supports the concept of a Paleo-Indian economy "oriented towards the exploitation of now extinct mega-fauna" which would be attracted to the floodplain ecosystem. The *Archaic Period*, which dates from 8000 to 2000 B.C., does not form a sharp break with the Paleo-Indian Period, but is a slow transition characterized by a modern climate, an increase in population, and an increase in the diversity of material culture. The chronology established by Coe (1964) for the North Carolina Piedmont, may be applied with little modification to South Carolina's Coastal Plain. The majority of the lithic specimens found in the coastal area have been made from coastal plain chert, piedmont rhyolite, or quartzite (see Koob 1976). The general sparsity of Archaic sites in the coastal zone may be the result of a more attractive environment inland adjacent to the floodplain swamps of major drainages. During this period the aboriginal occupants continue to be nomadic and live as hunters and gatherers. The *Woodland Period* begins by definition with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast. The first pottery types, termed Stallings and Thom's Creek, were made until about 1000 B.C. During the Woodland Period there is increasing social complexity and population growth. As a result of rising sea levels, extensive tidal marsh is created for aboriginal exploitation and there is a sudden increase in highly visible shell middens adjacent to the marsh. The increasing population pressure (Smith 1974; Trinkley 1976b) creates a gradual movement to and emphasis on the coastal zone. The first Stallings sites are expected to exhibit marginal reliance on shellfish and to retain the nomadic, seasonal, hunting and gathering economy. During the Early Woodland Thom's Creek Phase some sites, known as shell rings, are apparently permanent villages based on an economy of hunting mammals and collecting shellfish and fish (Trinkley 1980, 1983). Later in the Middle Woodland occupation again shifts to a seasonal round with shellfish collection occurring in the fall and winter (Trinkley 1980, 1981; Claussen 1982). The reasons for this shift are not entirely clear, but seasonal sites continue to be found into the Late Woodland. A synopsis

of Woodland Phases and pottery designations is provided in Table 1.

Previous archaeology in the Beaufort County area is recounted by Trinkley (1980, 1981) as well as Drucker and Anthony (1980). Of particular concern is work conducted at sites which date to the same approximate time period as the Fish Haul Creek site (the Early Woodland Stallings Phase, or about 2000 to 1100 B.C.), because this previous work provides a context for the present limited testing. Work on Early Woodland sites in the Beaufort County area begins with the 1930 to 1939 Charleston Museum excavations at the Chester Field and Lake Plantation sites (Flannery 1943; Griffin 1943). The Chester Field site is a Stallings-Thom's Creek shell ring, while the sites at Lake Plantation consisted of a number of small shell middens representing a range of Woodland cultural periods. In addition, Caldwell and Waring conducted WPA projects in Georgia (Williams 1968; Caldwell 1952, 1971). Waring also worked at the Sea Pines Shell Ring on Hilton Head Island, although this work was never published. Then, in the 1960s, interest resurged in coastal archaeology, evidenced by Calmes' (1967) work at Sea Pines and Skull Creek Shell Rings. At the Sea Pines Shell Ring Calmes excavated a single 5-foot square adjacent to Waring's old trench bisecting the ring. Both Stallings and Thom's Creek sherds were found, without any stratigraphic separation, although the plain pottery tended to be fiber tempered (Stallings) (Calmes 1967:24). The Skull Creek Shell Rings, which consist of two superimposed rings, were somewhat more thoroughly tested. Calmes noted that the majority of the pottery from Skull Creek was Thom's Creek. The University of South Carolina Archaeology Fieldschool conducted test excavations at Spanish Mount on Edisto Island, Charleston County, in 1973 and 1974 (Sutherland 1974). The site was found to date from the Thom's Creek Phase and to contain abundant Thom's Creek pottery.

In 1976 and again in 1979 work was conducted by Trinkley (1980) at the Lighthouse Point and Stratton Place Shell Rings in Charleston County. Both of these sites date to the Thom's Creek Phase. In 1978 and 1980 excavations were conducted at several Woodland sites on Pinckney Island, immediately north of Hilton Head Island (Trinkley 1981). At one of these, the Pinckney Island Midden, an extensive Early Woodland Stallings occupation was encountered below the Middle Woodland shell midden. Of particular interest is that this Stallings site contained only small amounts of shellfish in steaming pits. There was a limited reliance on plant foods or animals. The site was interpreted to represent the remains of a small band of hunter-gatherers who occasionally stopped along the edge of Skull Creek, collected shellfish, hunted, and then moved to another area. The site indicates a very mobile lifestyle, similar to Smith's (1974) construct for the Savannah River basin.

The Fish Haul Creek site is considered important to more fully examine this early, mobile lifestyle which is believed to be found early in the Stallings Phase, prior to a more thorough adaptation to the coastal environment. Consequently, several research objectives were outlined prior to the excavations. First, because the site was assumed to be large, we determined that any attempt to obtain a statistically representative sample would be impossible in the time available. Instead, several contigious units would be opened in a single area of the site.

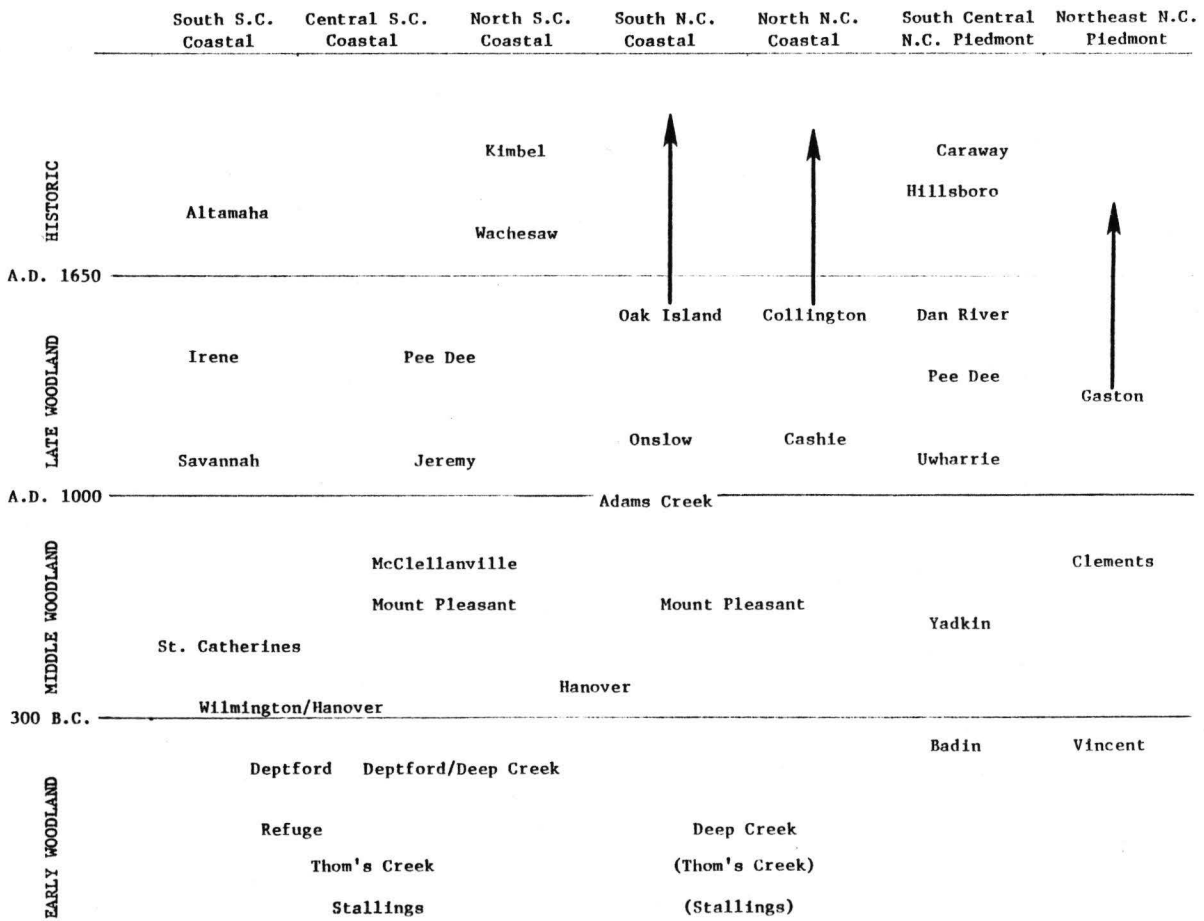


Table 1. Woodland and Historic phases and pottery series.

Second, our goal was to not only collect a sample of the pottery, but also to identify and excavate any pits which might be found. This goal would be assisted by the previous decision to open a large contigious area (see Trinkley 1980 for a discussion of feature recognition in small versus large excavation units). This strategy would not only ensure artifacts for typological study and chronological control, but would provide data on subsistence and seasonality from the features. Third, although we had decided that we could not be immediately concerned with the horizonal distribution of the site, we were interested in the vertical development of the site and understanding the site formation processes.

All of these goals were based on the realization that additional work at the site, while encouraged by Wekhorst and Crago, was dependent on the vagarities of future funding and that the present work might represent the only scientific investigation prior to development. We should indicate, however, that Crago asked for our recommendations concerning the importance of the Fish Haul Creek site and this request has also guided the nature of these excavations.

THE EXCAVATIONS

The excavations conducted at Fish Haul Creek were directed toward the recovery of a large, controlled sample of cultural remains, the identification of features, and the collection of subsistence data. Because of the limited time to be spent at the site, the potential size of the site (based on Wekhorst's description), and the desire to open a single, larger area rather than a series of small, dispersed units, we decided not to establish a site grid over the entire area, but rather to tie the excavations into several permanent reference points. The development had been surveyed and property corner pins were readily found along the subdivision road in an area of presumed high artifact density. The two northern most pins for lot 13 were used and the northeastern pin was established as the site datum with an assumed elevation of 100 feet (15.25 feet MSL). Three squares, 80-100R100, were laid out on a north-south line to form a 30 by 10 foot trench in lot 13 (Figures 2 and 3). In addition, two 5-foot test pits were excavated along the edge of the marsh; one in the center of lot 12 and the other at the northern edge of lot 16.

The three 10-foot squares, as mentioned above, were placed in an area thought by Wekhorst to contain large amounts of Stallings pottery. This was based on his experiences clearing the roads and using a backhoe to dig waterlines. In each situation the Stallings pottery was found several feet below the existing ground level. Despite this we began in square 100R100 by screening all soil through ¼ by ½-inch mesh. In this first square four levels, based on both natural and arbitrary distinctions, were removed. Level 1 was about 0.4 foot deep and consisted of a brown sand. Level 2, up to 0.3 foot thick, was a tan sand. The boundary between levels 1 and 2 is indistinct and these levels may be approximately equated with the Ap and C1 horizons respectively. Level 1 was found to contain nineteenth century refuse as well as occasional Early and Middle Woodland sherds. Level 2 contained quantities of Stallings pottery. Level 3, a yellow sand containing abundant Stallings pottery, was about 0.5 foot thick. An arbitrary level 4, also consisting of yellow sand, was excavated an additional 0.4 foot to determine the actual depth of the Stallings zone and the existence of earlier remains. This lowest level, while containing infrequent Stallings pottery, produced no earlier remains.

In square 80R100 these four levels were reduced to three by combining levels 1 and 2, combining levels 3 and 4, and creating a new level. Consequently, the brown to tan sand, containing very few artifacts, was removed as one level approximately 1.1 feet thick. The underlying Stallings zone was also removed as two levels; level 2 was about 0.9 foot thick and level 3 was about 0.6 foot thick. These levels should be subdivided into smaller excavation levels in future work. The thrid level, while containing a few sherds, is the bottom of the Stallings zone and is similar to the lowest portions of level 4 in 100R100.

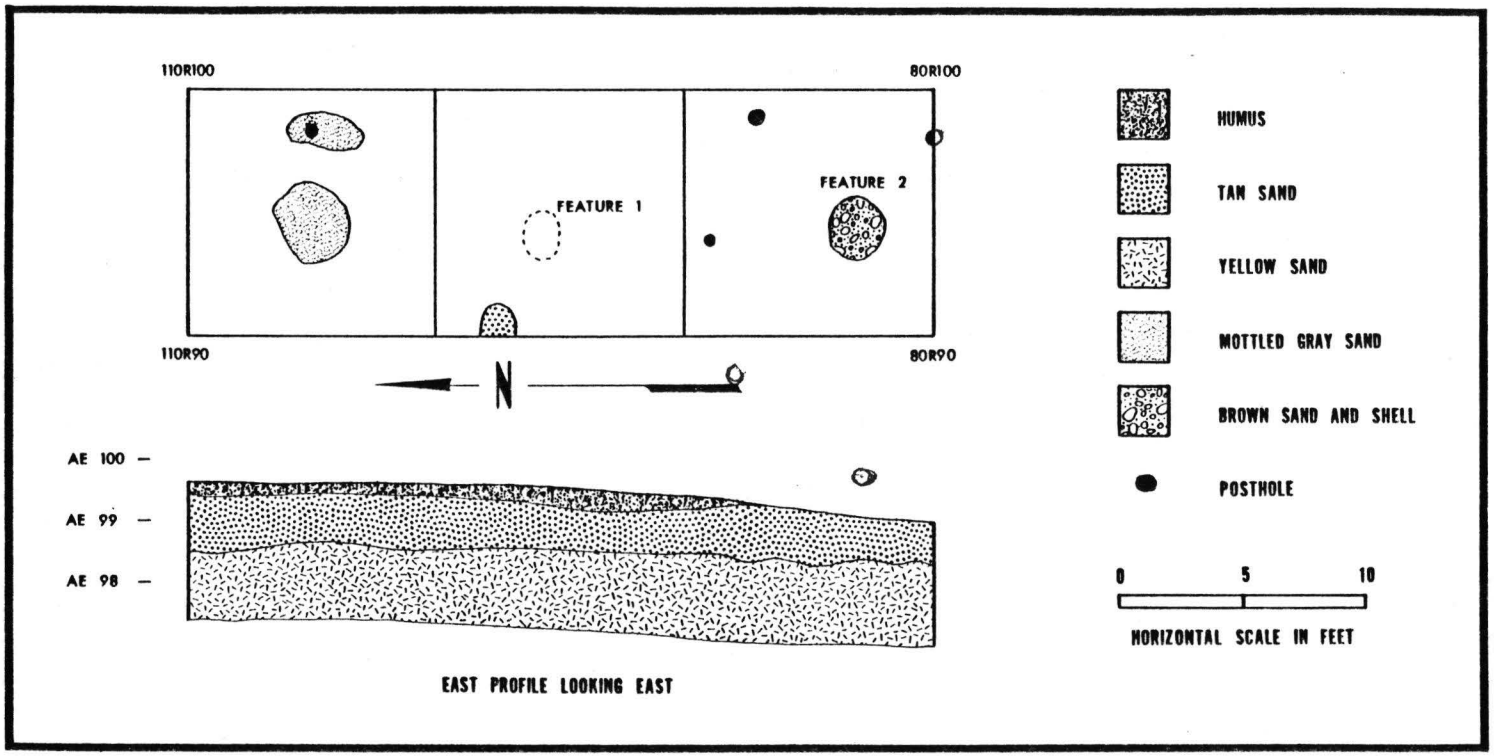


Figure 2. Plan view and profiles of squares 80-90R100, Fish Haul site.

Having determined from squares 100R100 and 80R100 that level 1, the brown to tan sand zone overlying the Stallings zone, contained little or no in situ prehistoric or historic remains, we used a backhoe to remove this zone from square 90R100. The remainder of the excavations in 90R100 followed those outlined for 80R100 with the Stallings occupation primarily removed as level 2 and a final basal level excavated to check for deeper buried remains.

Test Pit 1, a 5-foot square situated in lot 12, was found to consist of a black humus zone about 0.2 foot in thickness overlying a mottled and disturbed light brown sand. Four levels, each 0.5 foot in thickness, were excavated. Historic remains were found to the base of the unit and it was not until the profiles were cleaned that we discovered the square had been laid out in the middle of a wide trench originating in level 1 below the black humus, and that only a small amount of the square was not involved in the ditch feature. The ditch roughly parallels the marsh edge and the fill is lensed, which suggests the ditch was gradually filled in through wash. In addition, at the base of level 4 a square posthole was discovered. Test Pit 2, situated in lot 16, was also found to be heavily intruded by late nineteenth century historic remains. Five levels, each 0.5 foot in thickness, were excavated. The upper 0.6 foot of the square consisted of a black humus and shell zone. This zone contained predominantly nineteenth century remains and appears to be a historic midden. A large feature, originating within the shell midden, was found in the northwestern corner of the square and continued to a depth of 1.2 feet. Beneath the shell midden was a mottled tan zone overlying a yellow sand. This tan sand probably represents the pre-nineteenth century A horizon (Figure 4).

The 10 by 30 foot trench was troweled, photographed, and plotted at the base of level 3. A sherd cluster was identified in level 2 of square 90R100 and was removed during these excavations (Figure 5). This cluster, designated Feature 1, was the collapsed portions of a single Stallings Punctate vessel. No pit outline was visible, probably because of leaching, but the position of the sherds suggests that portions of the broken vessel were deposited in a shallow pit. This cluster was found in an area 2.2 by 1.4 feet centered at 95.5R93.5. At least three features and three postholes were recognized at the base of level 3 and one of these, Feature 2, was chosen for excavation. This feature was situated in the south central portion of square 80R100, originating within level 3. The feature was sectioned into north and south halves, with all the soil from the south half waterscreened through 1/16-inch mesh. Half of the soil from the north section was also waterscreened while the remainder was dry screened through ¼-inch mesh. Artifacts from this feature were not abundant, although Stallings sherds and chert thinning flakes were found. Charcoal was common and shells (primarily oyster, with minor amounts of clam, ribbed mussel, stout tagelus, and cockle) found in the pit were clustered in a semi-circle from the northwestern quadrant around counterclockwise to the southeastern quadrant. The shells were packed against the pit walls and probably represent a single load of discarded shells which had later been shifted to the edges to make room in the pit for later use. It is probable that the feature functioned as a steaming pit, based on the presence of the unburnt shells and the abundant charcoal (Figure 6).

Figure 3. Excavation in 80-100R100, looking southeast toward Fish Haul Creek marsh.

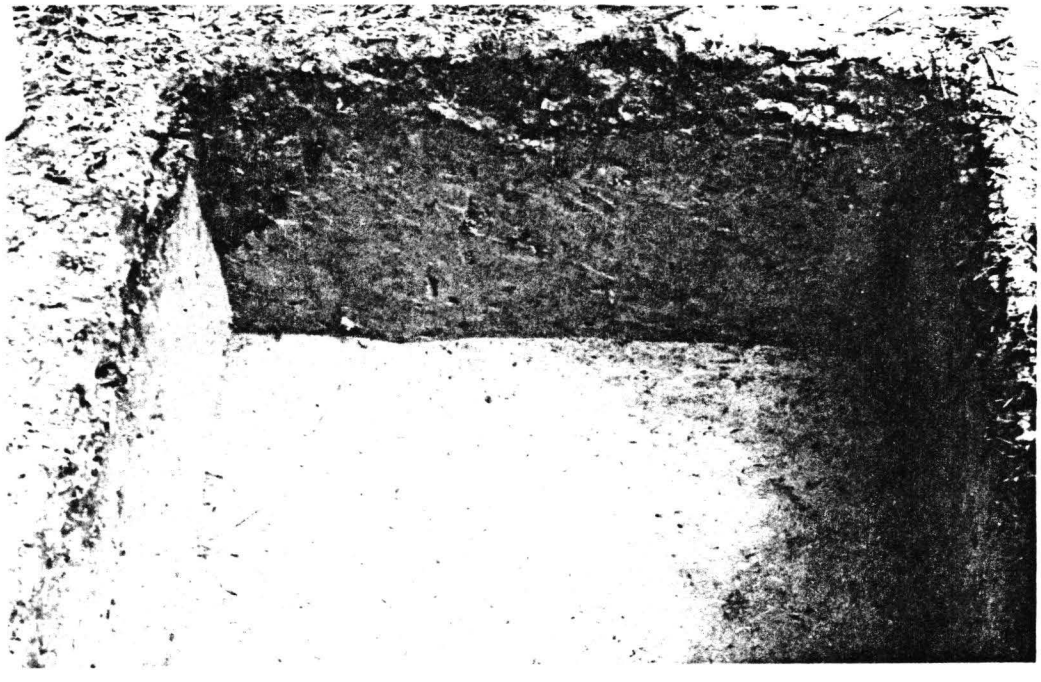


Figure 4. Test Pit 2, north profile, looking north at the base of level 5.

Figure 5. Feature 1 in square 90R100, base of level 2, looking south.

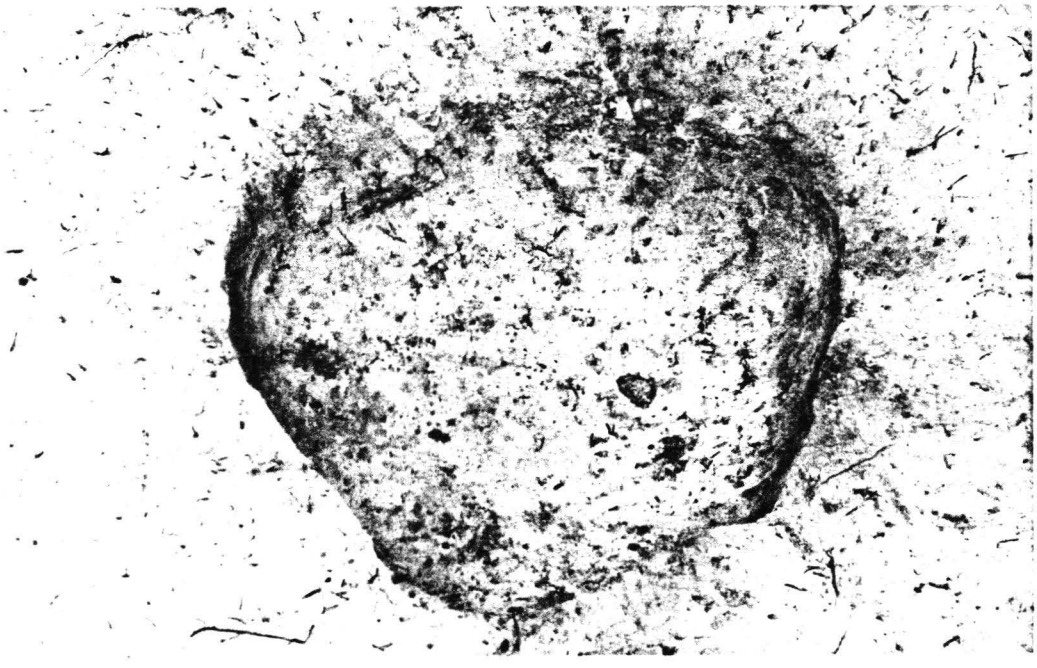


Figure 6. Feature 2 in square 80R100, after excavation, looking east.

These excavations, in summary, provided information on the stratigraphy of at least a portion of the Fish Haul Creek site and indicated that the Stallings zone was sealed beneath at least 1.1 feet of relatively sterile overburden which represents soil formation since the second millineum. This work also indicated that features were preserved in good contexts at the site and that some dietary information (such as animal bones and plant remains) might be preserved in shell features despite the acidic soils. The Stallings occupation was found to occur not at the bank of Fish Haul Creek, but rather inland about 100 to 150 feet. A Deptford occupation was found scattered along the bluff and slightly inland and a substantial nineteenth century historic site was identified along the edge of the marsh.

ANALYSIS

This analysis will consider not only the artifacts such as pottery, lithics, fired clay, and historic remains, but also the ecofacts, defined as archaeological nonartifactual data which provide information concerning man's use of the environment. Ecofactual analysis includes ethnobotanical study of the recovered charcoal, examination of the shellfish remains from Feature 2, and the study of the recovered animal bones.

Pottery

Of the 636 sherds recovered from the three 10-foot squares and two 5-foot test pits only 338 (53.1%) are over 1-inch in diameter and therefore suitable for typological analysis. This study, which concentrates on the examination of both ware characteristics (paste and vessel form) and surface treatment or decoration, reveals the presence of three pottery series: Stallings, Thom's Creek, and Deptford (Table 2). These series span the entire Early Woodland Period and date from about 2000 to 300 B.C. About 89.6% of the sherds belong to the Stallings Series (N=570), while 63 sherds or 9.9% are typed as Deptford. The Thom's Creek Series is represented by three sherds for 0.5% of the total collection.

The Stallings Series is recognized by the occurrence of fiber tracks, the result of plant material which oxidized during the firing process. Whether this fiber is actual aplastic tempering or accidental inclusions is not resolved, although analysis of the carbonized fibers reveals that only Spanish moss (*Tillandsia useoides*) was used as temper (Simpkins and Scoville 1981). Characteristic of this series is the general absence of obvious coil fractures, which suggests to many archaeologists that only a modeling technique of construction was used. Decoration may include a variety of punctation modes, incising, and minor amounts of simple stamping and finger pinching. Wauchope (1966:45) and Fairbanks (1942:228) have noted the presence of cord marks, net impressions, and fabric impressions on Stallings sherds, although such discoveries appear to represent accidental impressions. At the Fish Haul site plain, punctated, and incised Stallings pottery is found, although several specimens with cordage impressions will be discussed below.

The Stallings Series type site is Stallings Island, in the Savannah River immediately north of Augusta, Georgia (Claflin 1931). Sites which contain Stallings pottery are most abundant within the Savannah River drainage and in Beaufort County, South Carolina, although the pottery is found throughout the coastal plain of South Carolina. The pottery is recognized as the oldest pottery made in eastern North America. A date of 3050±180 B.C. (UM-432) has been obtained from a hearth with fiber tempered pottery at a site in Camden County, Georgia, although the 2515±95 B.C. (GXO-345) date from Rabbit Mount in Allendale County,

	Stallings Plain	Stallings Punctate: Shell	Stallings Punctate: Reed	Stallings Incised	Stallings small sherds	Thom's Creek Plain	Deptford Plain	Deptford Check Stamped	Totals
80R100, level 1	1	2	1		3	2	1	1	11
level 2	17		19	1	60		1		98
level 3	1		4		5				10
totals	19	2	24	1	68	2	2	1	119
90R100, level 1	1	1	3		3				8
level 2	7	5	26		50				88
level 3	1		1						2
totals	9	6	30		53				98
100R100, level 1	2	1					1		4
level 2	4	1	8	3	45				61
level 3	11	2	17		70				100
level 4	3		3		5				11
profiles	4		7	1	20				32
totals	24	4	35	4	140		1		208
TP1, level 1	1				2			1	4
level 2	4				1			2	7
level 3	8				10			2	20
level 4	4				20	1		2	27
trowel							2		2
totals	17				33	1	2	7	60
TP2, level 3	2						24		26
level 4	1		1				18		20
profiles		1					8		9
totals	3	1	1				50		55
Feature 1		85							85
Feature 2, S½	4		1		4				9
N½	2								2
totals	6		1		4				11
Total	78	98	91	5	298	3	55	8	636
%	12.3	15.4	14.3	0.7	46.9	0.5	8.6	1.3	100

Table 2. Pottery recovered from the Fish Haul site.

South Carolina is more frequently cited. The most recent radiocarbon date of 1060±80 B.C. (UGa-1686) comes from Cunningham Mound C in Liberty County, Georgia. While the Stallings Series was at one time considered to predate the development of Thom's Creek pottery, there is mounting circumstantial evidence that the two co-existed. The radiocarbon date ranges for the two series overlap and the pottery is frequently found stratigraphically mixed. Similar comments on this co-occurrence are made by Claflin (1931:14), Bullen and Greene (1970:18), Waring (Williams 1968:159), and Crusoe and DePratter (1976:15).

No coil fractures are observed on the Stallings pottery from Fish Haul and the paste is tempered with variable amounts of fiber which oxidized during firing to produce vesicles. Several sherds show lateral breaks which reveal abundant tempering holes in the middle of the sherd, sandwiched between two layers of less heavily tempered clay. The sherds, however, are obviously tempered and none can be called simi-fiber tempered. The clay is composed of uniformly very fine sand. No coarser inclusions were observed in any of the sherds. The pottery is relatively hard for the Stallings Series, being at least 3.0 on the Mohs scale, but rarely over 4.0. The texture of the pottery is generally quite compact. Some have a sandy feel, although most have an almost soapy or smooth feel (see Williams 1968:159). A few have a noticeably contorted paste which appears to include fragments of sun-dried clay (Figure 8b). The color ranges from yellowish-red to strong brown with a few sherds in the range of reddish-yellow. The cores are usually black, although a very few specimens are a more uniform color. Based on these colors most Stallings pottery was incompletely oxidized during firing, and, since occasionally the core or the interior wall is darker, the firing process apparently included either firing the vessel upright or inverted in the fire.

Twenty-seven Stallings rim sherds are found from Fish Haul. Three lip forms are identified, including rounded, which may include gently rounded or pointed; flattened, which may be slightly beveled; and those having a straight interior wall and a gently rounded exterior wall. These lip forms are paralleled by the Thom's Creek Series (Trinkley 1976a), and are typical of the Stallings Series elsewhere. The flat lip is found on only one sherd (3.8%), the rounded lip is the most common (65.4%), and the lip with the straight interior wall and rounded exterior wall is found on eight specimens (30.7%). The validity of such lip descriptions, however, is questioned. On the four reconstructed rim sections which are over 15 cm there is considerable variation of lip style. One specimen, from Feature 1, with a partially reconstructed circumference of 33 cm, incorporates all three lip styles. The manufacturing techniques apparently did not emphasize standardization of the lip. The rim forms vary from straight to slightly incurvate. The typical vessel appears to be a simple, large, wide mouthed bowl, although something approaching a cazuela shape is indicated by the few incurvate rims. Vessel diameters at Fish Haul are about 34 to 40 cm. No good basal specimens were recovered, although the vessel from Feature 1 appears to have had a slightly rounded bottom and is estimated to have been about 20 cm in depth. Vessel wall thickness varies from 6 to 16 mm in the Fish Haul collection and the rim sherds range from 6 to 12 mm (mean thickness is 9.2 mm).

Stallings Plain at Fish Haul accounts for 12.3% of all pottery and 28.7% of the Stallings collection over 1-inch in diameter (Figure 7a). This pottery exhibits considerable variation, but most is well smoothed on both the interior and exterior surfaces. A few sherds are very carefully smoothed, with a polish almost being achieved. One specimen evidences deep bivalve scraping marks. Usually, however, the only obvious marks are the fiber tracks. Tooling is only infrequently observed at the tip. At least one specimen from Fish Haul (2345p6; Figure 7a, far left) evidences an interior red slip similar to that found on Thom's Creek specimens (Trinkley 1976a:44, 50). Crusoe (1972:20) also reports finding examples of an interior slip on some Stallings sherds. While it is quite probable that some Stallings Plain vessels occurred, many plain sherds are from zoned or incised vessels.

Previous researchers (Sears and Griffin 1950; DePratter 1979) have chosen to lump all punctate motifs together for analytic purposes, while recognizing the great variety inherent in the type Stallings Punctate. Dye (1976) separated the punctate specimens from Bilbo into punctate, linear punctate, and drag and jab varieties. The punctated motif has also been categorized as linear and random (Williams 1968:160, 249), linear and individual (Sears and Griffin 1950), or simple, compound, curvilinear, and random (Crusoe and DePratter 1976:17-18). This analysis uses a slightly different approach, separating the punctations made with a shell, usually the tip of a marsh periwinkle (Figure 7b), from those made with reeds, sticks, or bones, usually square or triangular, but occasionally round (Figure 7c). Reed punctations may be individually applied without any overlap or may be arranged in rows using a drag and jab technique. Individual punctations may be arranged in rows or may be more randomly applied, particularly toward the bottom of the vessel. Both shell and reed punctations may cover the entire vessel, although they are frequently found restricted to the rim area. Occasionaly examples of zoned punctations and curvilinear motifs are discovered.

The distinction between shell and reed punctations was first used in the analysis of Thom's Creek pottery (Trinkley 1976a). It was discovered that the Thom's Creek Series could be seriated such that a transition from plain to reed punctate to shell punctate to finger pinching was observed at a variety of sites (Trinkley 1980). Because of the partial contemporaneity of the Stallings and Thom's Creek Series it seems reasonable to attempt a typological separation of shell and reed punctate pottery at Fish Haul and also to see if a sequence of the plain, shell punctate, and reed punctate types can be identified from the excavated levels.

Squares 80R100 and 90R100 are combined because of similar excavation levels, while square 100R100 is tabulated separately. In 80-90R100 the plain pottery decreases from 28.6% in level 3 to 22.2% in level 1, while shell punctate Stallings increases from 0% in level 3 to 33.3% in level 1. The reed punctate pottery decreases from 71.4% in level 3 to 44.4% in level 1. Square 100R100 shows similar trends, although there are so few sherds in level 1 it is eliminated from consideration. Plain Stallings decreases from 50% in level 4 to 25% in level 2, while shell punctate increases from 0% in level 4 to 6.3% in level 2. The reed punctate pottery, however, remains relatively

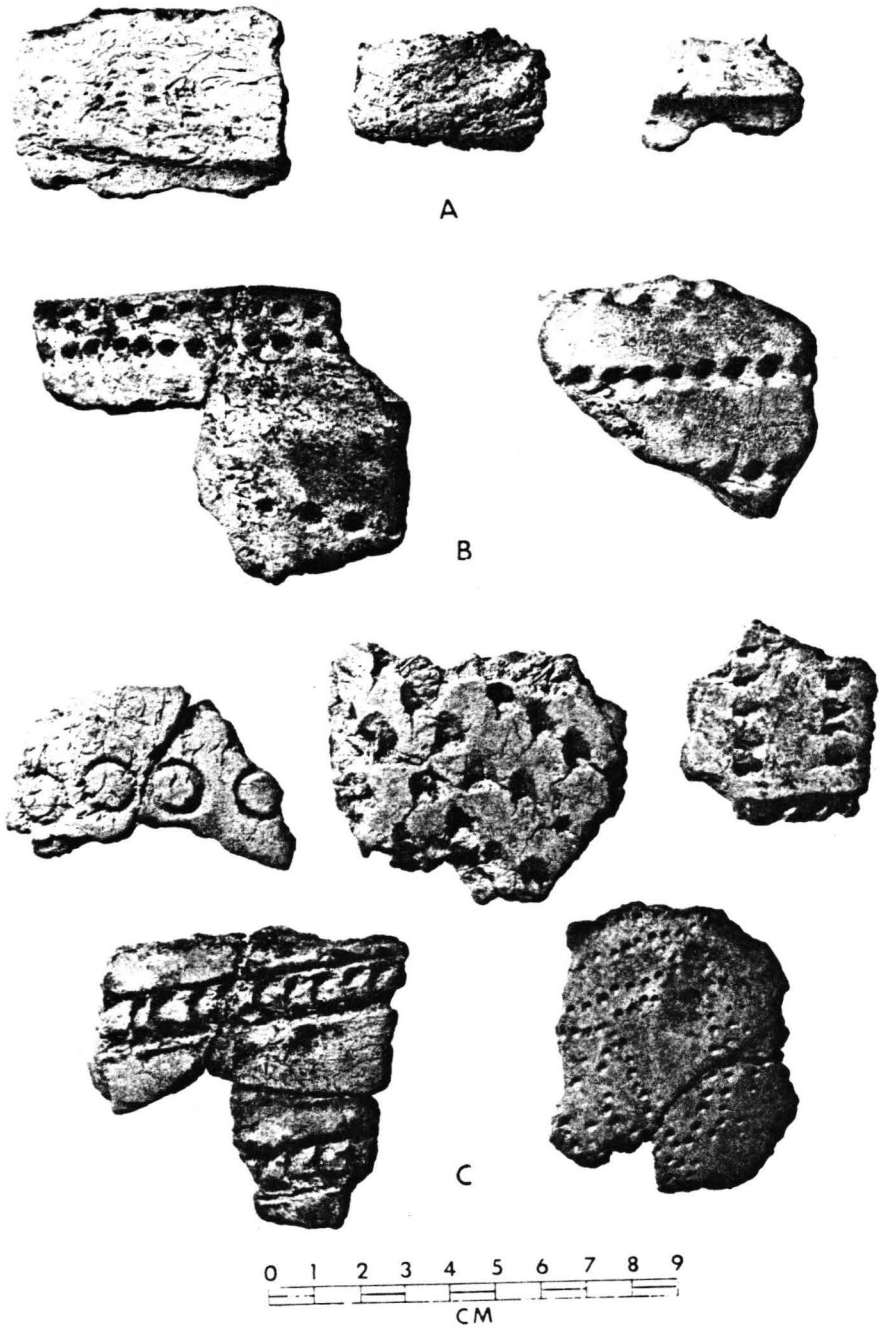


Figure 7. Stallings Series Pottery. A, Stallings Plain, with extensive abrasion damage; B, Stallings Punctate, shell variety; C, Stallings Punctate, reed and stick variety.

uniform in popularity in levels 2 through 4. In both analytic units Stallings Incised pottery is found only in level 2. No finger pinched Stallings pottery was recovered. While these results have low statistical reliability, they are sufficient to suggest that the Stallings ware may follow a similar developmental sequence as Thom's Creek, with Stallings pottery slightly earlier in time. The relative ages are indicated not only by the available radiocarbon determinations, but also the low incidence of Stallings Finger Pinched pottery.

The Stallings collection from the nearby Pinckney Island midden is similar, with 93.4% of the Stallings component being plain and 4.3% being reed punctate. Only 9 sherds (1.7%) are shell punctated. Because the Stallings zone was fairly thin (about 0.6 foot thick) at Pinckney Island, it is not possible to see any change in the pottery type frequencies over time, although the occupation may have been early in the Stallings Phase.

Five sherds (0.7% of the entire collection or 1.8% of the Stallings large sherds) of the type Stallings Incised are found in the Fish Haul collection (Figure 8a). Fairbanks (1942:224-225), Bullen and Greene (1970:19-20), and Sears and Griffin (1950) all mention the motif. Williams (1968:160) and DePratter (1979:115) offer descriptions for the very similar (or identical) St. Simons Incised. Dye (1976) uses the designation Stallings Incised var. Bilbo. The technique includes both broad, shallow lines made with a flattened instrument while the clay was soft and narrow, more angular lines made with a pointed instrument when the clay was leather hard. Both varieties are found at Fish Haul, although the former is more common. Incised motifs seem to occur most frequently as horizontal bands at the rim. While cross-hatch and geometric examples are found, none were recovered from Fish Haul. As previously mentioned, incising is found only in level 2, relatively late in the occupational history of Fish Haul.

Waring (Williams 1968:207) first mentioned abraded sherds from the Refuge Site. Recently Thomas and Larsen (1979:44-47) have discussed this artifact type and find it diagnostic of Refuge pottery. Refuge abraders exhibit a variety of wear patterns including shallow grooves, but Thomas and Larsen (1979:45) exclude sharp grooves which they define as sherd hones. Sherd abraders are also identified from earlier Thom's Creek sites (Trinkley 1980:174, 203-204) where they may be 5 to 10 mm in width and up to 40 mm in length. Michie (1979:64-67) has also identified a variety of sherd abraders from a Thom's Creek Phase site on Kiawah Island. Similar tools now have been identified from the Stallings component at Fish Haul (Figures 7a, 7b, far left). The two types of wear observed from the Stallings component include what Thomas and Larsen (1979:45) describe as shallow groove surface damage and flat surface abrasion. The grooves have a width in excess of 10 mm and a depth of 4 to 7 mm. The flat wear pattern is less common and occurs in areas up to 40 mm square. A total of seven Stallings sherds were identified with some form of wear.

Occasional researchers (Wauchope 1966:45; Fairbanks 1942:228; Dye 1976:139) have noted the presence of Stallings sherds with cord, net, and fabric impressions. Some have suggested that these impressions may

have been intentional, although they are more commonly attributed to accidental impressions. Six sherds from Fish Haul (three from 90R100, level 2 and three from 100R100, level 3) exhibit a considerable number of cordage fragment impressions (Figure 8b). The cordage impressed in these specimens ranges from 1.5 to 2 mm in diameter and has either two or four twists per centimeter. All of the cords have a Z or left final twist and have an angle of twist around 35°, which is classified by Hurley (1979:5) as tight. The sherds indicate that the cords were applied in parallel, crossing bands, but were not knotted. Several of the cord impressions are so deep and clear it may be that they were created by the cordage burning out during the firing process. While the extent and regularity of these impressions argues against any sort of accidental inclusions or impressions, we are not prepared to argue for any sort of intentional surface treatment.

The three sherds of the Thom's Creek Series (Trinkley 1976a) comprise too small a sample to warrant extensive description, and may even represent aberrant Stallings specimens with little or no fiber tempering as a result of poor paste mixing. Many differences in classification are the result of the investigator. Griffin (1943:165) found only Stallings pottery in the sample from Chester Field Shell Ring in Beaufort County. When a partial collection from Chester Field in the Charleston Museum was examined by Gene Waddell his notes indicate that of the 102 sherds, 94 or 92.2% were thought to be Stallings while the remainder were typed as Thom's Creek. A recent examination by Trinkley of 240 sherds from Chester Field at the Charleston Museum reveals that 177 or 73.8% are Thom's Creek and only 63 or 26.2% are identified as classic Stallings specimens. This great variation may result, at least in part, from the samples used; some variation is also expected to be the result of differing opinions on what is actually fiber tempered and what may be attributed to accidental inclusions.

A total of 63 Deptford Series sherds are recovered, primarily from the test pits along the bluff edge overlooking Fish Haul Creek. The majority of the specimens (55 sherds or 87.3%) are typed as Deptford Plain, while eight sherds are classified as Deptford Check Stamped. From its earliest description the Deptford Series has been characterized by a fine to coarse sandy paste and check stamped surfaces (Caldwell and Waring 1939). The earliest date for the Deptford Series, 1240±130 B.C. (RL-1034) has been obtained from a Lexington County, South Carolina site. The most recent Deptford date comes from St. Simons Island, Georgia where a date of A.D. 935±70 (UM-673) was obtained. The pottery is found from Georgia onto the South Carolina coast and inland to the fall line.

At Fish Haul the Deptford Plain pottery contains abundant medium to coarse sand with occasional very coarse particles. The pottery has a hardness of about 4.0 on the Mohs scale. The texture is compact with a very gritty feel. The color is a uniform very pale brown with an incompletely oxidized core. Both the interior and exterior surfaces are roughly smoothed. The majority of this Deptford Plain pottery (50 sherds) came from Test Pit 2 and appears to represent a portion of a single vessel having both a rounded and flattened lip, straight rim, and a wall thickness of 9 mm. The vessel is a deep, cylindrical jar with straight sides.

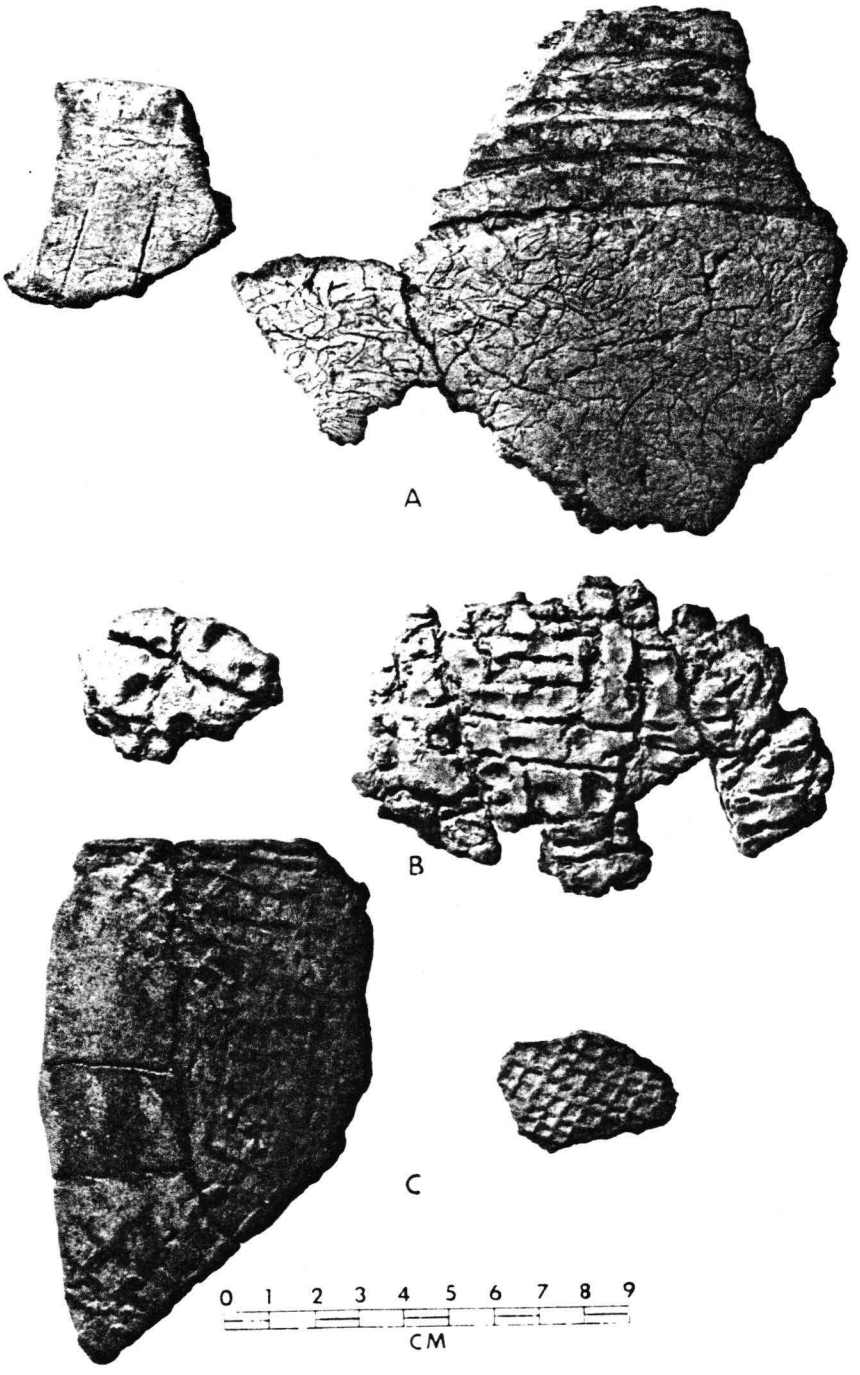


Figure 8. Stallings and Deptford Series Pottery. A, Stallings Incised; B, Stallings sherds with cordage impressions; C, Deptford Check Stamped.

The few sherds of Deptford Check Stamped closely follow the type descriptions of Caldwell and Waring (1939), Willey (1949:357), Griffin and Sears (1950), and DePratter (1979:124-125). The paste is composed of fine sand with rare inclusions of a medium sand. Colors are darker than the plain sherds, ranging from brown to reddish-brown. The exterior surface is impressed with a carved wooden paddle which consists of a grid of parallel lines crossing each other at right angles. The resulting checks with raised lands are square and show considerable variation in size (Figure 8c).

A single Deptford Check Stamped sherd (Figure 8c, far left) evidences considerable abrasion similar to the acute, rounded edge damage and flat surface abrasion described by Thomas and Larsen (1979: 44-45) for the Refuge Series from St. Catherines Island, Georgia. The wear on the Deptford sherd is also similar to wear observed on Thom's Creek and Stallings sherds and suggests that similar activities were taking place during at least the 1700 years of the Early Woodland.

While not identified in these excavations, surface collections from Fish Haul also have produced sherds of the Deptford Cord Marked (DePratter 1979:126; Caldwell and McCann 1940) and Savannah Fine Cord Marked (Caldwell and Waring 1939; Caldwell and McCann 1941) types. The Savannah Fine Cord Marked type is similar to the Mount Pleasant Series to the north (Phelps 1980) and to the Untyped Series found in the Pinckney Island vicinity (Trinkley 1981). The Deptford Cord Marked type also dates from the later portion of the Early Woodland, but cord marking represents a late graft, perhaps from the north, on the pre-existing Deptford Series. The Savannah Fine Cord Marked pottery is found in the transition from the Middle to Late Woodland and a single date from Pinckney Island places the pottery at A.D. 565 (Trinkley 1981:41), although DePratter (1979:111) suggests a date from A.D. 1150 through A.D. 1300. The A.D. 265 to 890 dates for the Mount Pleasant Series in North Carolina may represent the origin of this concept in the north.

Lithics

Stone specimens from Fish Haul are uncommon and fall into five categories: projectile points, hammerstones, nutting stones or anvils, flakes, and unaltered rocks classified as raw material. The sparseness of remains is characteristic of most coastal sites.

The two projectile points are both made from light tan coastal plain chert which was not heat treated prior to being worked. The one specimen recovered from 80R100, level 2 is complete and measures 58 mm in length, 31 mm in width, 12 mm in stem width, and 10 mm in thickness (Figure 9a). The specimen falls within the range of the Small Savannah River Stemmed point type (Oliver 1981:124-125; South 1959:153-157). The Small Savannah River Stemmed point appears to represent a "chronologically distinct type associated with the latter portion of the Savannah River Phase" and has been dated to 1565±140 B.C. at the Warren Wilson Site in Buncombe County, North Carolina (Oliver 1981:205-206). The other Fish Haul specimen was recovered from the surface and consists of a basal fragment (Figure 9a, far right). The width is estimated to be 36 mm, the stem width is 22 mm, and the thickness is 12 mm. The projected length of

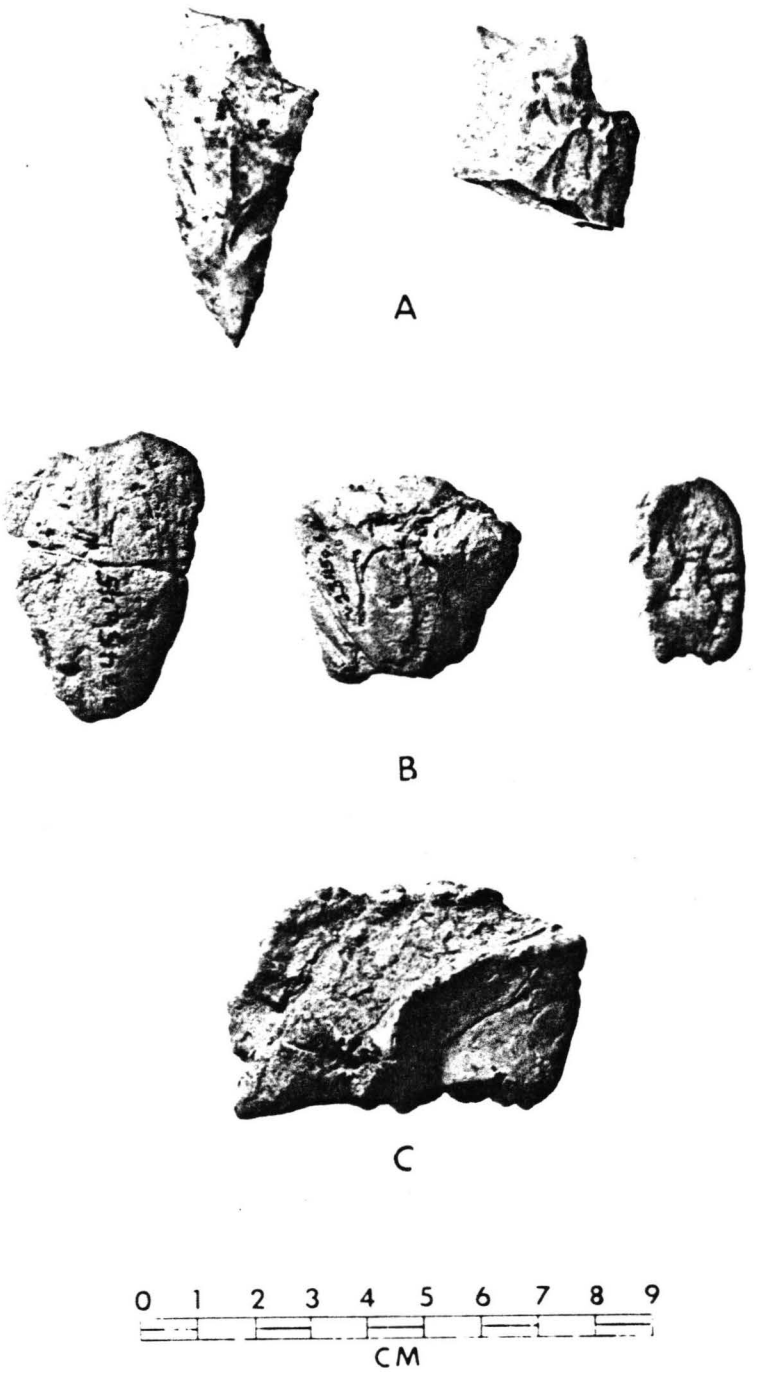


Figure 9. Miscellaneous Artifacts. A, Small Savannah River Stemmed projectile point (left) and Savannah River Stemmed Incurvate Based variety (right); B, fragments of baked clay objects; C, fired clay molded by hand.

90 mm places the point outside the range of the Small Savannah River Stemmed type, but generally within the range of the Savannah River Stemmed Incurvate Base variety described by Oliver (1981:117).

Both specimens have parallels at Thom's Creek sites (see for example Trinkley 1980:204-207, 266-269; Michie 1979:56-60). The extensive wear along one edge is common and is observed on many illustrated specimens from the Stallings Island site (Claflin 1931:Plates 56, 57, 58). This "lopsided" appearance suggests that these points were commonly used as knives. The intact specimen from Fish Haul exhibits extensive hinge fracturing along the frequently resharpened edge, further supporting the use of the tool as a cutting instrument.

Two quartz hammerstones were recovered, one from 80R100, level 2 and the other from 90R100, level 2. Measurements range from 33 by 64 by 74 mm for the unbroken specimen to 46 by 77 mm for the damaged hammerstone and both show extensive edge damage. The intact specimen also exhibits moderate surface abrasion, perhaps from using the stone as an anvil. A singe nutting stone or anvil, measuring 73 by 129 by 94 mm, was recovered from 90R100, level 2. The stone is a poor grade local chert boulder with two depressions, both about 20 mm in diameter and 4 mm in depth, on opposite faces. Such artifacts may have served a variety of purposes, including preparation of floral materials or as an anvil in stoneworking.

Flakes from Fish Haul include two quartz primary flakes, one orthoquartzite primary flake, and five non-heat treated chert secondary flakes. While this collection is very small it appears to represent an emphasis on resharpening existing tools, rather than the manufacture of new items, which supports the heavy utilization shown by the two recovered projectile points.

Anderson (1979:235-236) has previously noted that while thermal alteration of chert is common in the Early Archaic, it becomes less common in the Late Archaic and is uncommon in Woodland times. In support of this assessment, none of the chert specimens from Fish Haul were thermally altered. Anderson notes that the low incidence of heat treating on Savannah River Stemmed points may be a result of their "crude hard hammer manufacture" or of the "functional diversity" of the points "since unaltered material would probably have a longer use-life" (Anderson 1979:236).

Fired Clay

A total of 15 fired clay items were recovered from Fish Haul. Fourteen probably represent fragments of baked clay balls (Figure 9b); while one specimen has been pressed by hand and fired, but is not of a common shape (Figure 9c). Similar fired clay objects are common on Stallings sites (Williams 1968) and may occasionally be found on Thom's Creek sites (Trinkley 1980:428). They appear to have functioned as heating stones and are usually punctated or grooved.

Historic Remains

The Civil War years brought several changes to the usually quiet Hilton Head Island. Prior to the War Years, the some fifty square mile island was the site of 24 plantations which produced the profitable sea island cotton (Carse 1961:25). Located on the northeastern tip of the island was the Drayton family's Fish Hall or Haul plantation. Like Fish Haul, the majority of Hilton Head plantations were under absentee ownership, but were the home of large groups of black slaves who worked the fields. The occupation of the island by federal troops radically altered the size and composition of the island's population.

Hilton Head lies at the entrance to what has traditionally been considered the best natural harbor on the southeast Atlantic coast. Therefore, Fort Walker, at the eastern tip of the island, was a logical target for the Union Navy, in their early attempt to blockade the Confederate coast. Fort Walker was seized by the Union in November 1861. Confederate forces and civilians fled the island, leaving behind hoards of perplexed black slaves. Hilton Head became the supply base for the entire southern blockade (Holmgren 1959:96).

This central function brought to Hilton Head a tremendous population of Union troops, more than 23,000 by 1863. Following the troops were numbers of sutlers and civilians, providing goods and services to the troops. The area around Fort Walker developed into a sizable town, containing many substantial wood structures (Figure 10). The central focus of this town was the street of stores known as Sutlers Row, or "Robber's Row." The town, known as Port Royal, even supported a newspaper and three hotels. Buildings also included hospitals, supply depots, barracks, and a prison. Officers and others of high rank made their homes in nearby plantations, including the Drayton's Fish Haul. Much contrband and confiscated cotton passed through Fort Walker; so much, in fact, that the port was declared open to foreign trade and a customs house was established (Holmgren 1959:98).

The newly freed or abandoned blacks flocked to the Fort Walker area. Many of them, uncertain of the future in the face of the confusing War, chose to seek the protection of the Union troops. These people initially made temporary homes in tents and other shelters adjacent to Fort Walker. When General Mitchell assumed command of the Fort in 1862, he began efforts towards the construction of adequate housing for these freedmen, by now numbering several thousand (Holmgren 1959:102; Carse 1961:91). A town of pine barrack-like structures was constructed on the north end of the island, across Fish Haul Creek, and was called Mitchellville in his honor (Figure 10). Considerable attention was paid to the freedmen, through what was called the "Port Royal Experiment" (Carse 1961:93). Under Union direction the freedmen worked the island's cotton fields. A number of teachers were sent from the north and, under the direction of the Freedman's Bureau, began a massive program in education. The first all black regiment was organized from freedmen on Hilton Head Island (Higginson 1969).

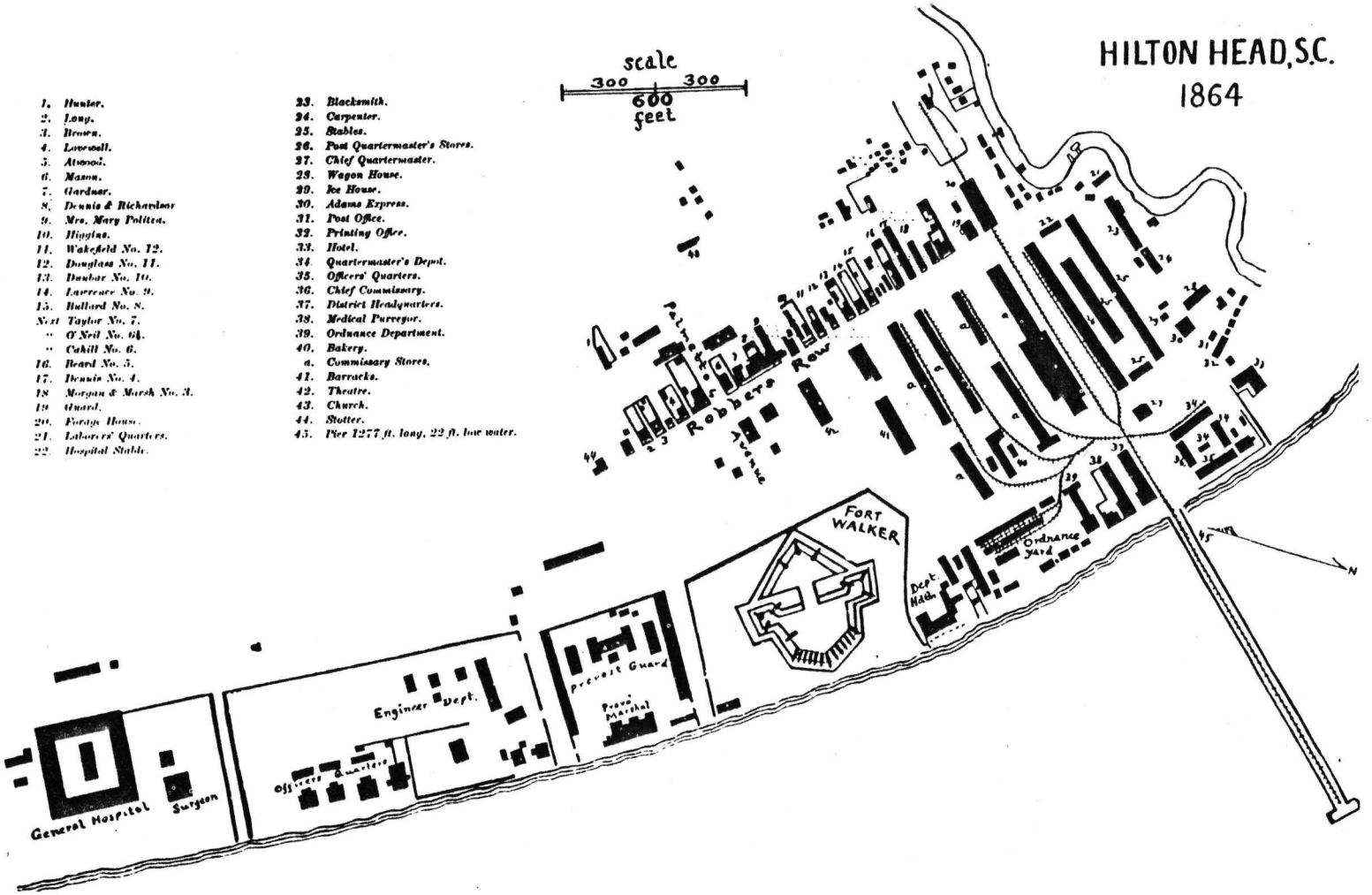


Figure 10. Map of the 1864 city of Port Royal on Hilton Head Island, south of Fish Haul Creek. Courtsey of Robert Carse (1961:133).

With the close of the Civil War, the Union troop population withdrew from the island and Fort Walker was abandoned on January 14, 1868 (Munden and Beers 1962:406). The black inhabitants of Mitchellville remained, however. Eventually they acquired farms and homes of their own on the island.

The Fish Haul site is located directly across Fish Haul Creek from Fort Walker. It is within the original bounds of Fish Haul plantation, although the main house and associated structures were probably located more the north. The site is also adjacent to the suspected site of Mitchellville, the freedman community of the Civil War and postbellum years. During the excavation of the Fish Haul site a historic compoenent was located and excavated. Historic materials were recovered from all excavation units, although they were concentrated in the two test pits adjacent to the bluff. In addition, the two test pits contained intact historic features. A ditch and a square posthole were located in Test Pit 1, while a pit was located in Test Pit 2. Materials were recovered from the ditch and pit; the posthole was not excavated. The assemblage suggests that these materials are the result of occupation of the site of Mitchellville.

A summary of historic materials is shown in Table 3. The assemblage is composed of a range of domestic materials temporally associated with the nineteenth century. Whiteware comprised the overwhelming majority of the ceramics recovered, and the 73 fragments include shell edged, transper printed, hand painted, annular, and plain decorations (Price 1979). The only other type of ceramic artifact present was six sherds of Colono ware (Ferguson 1980; Drucker and Anthony 1979). This will be further discussed in the following pages.

The glass assemblage is also typical of the nineteenth century and includes fragments of green, brown, and clear bottle glass. A molded panel bottle with raised letters suggests a mid-nineteenth century date of deposition for the materials, as such bottles were not manufactured until 1867 (Lorraine 1968:44). The architectural assemblage was extremely small and consisted of two nails and a fragment of window glass.

Though small, the assemblage contained a substantial number of non-kitchen items. These include two brass buttons, a key fragment, two kaoline pipe fragments, and an unidentifiable piece of furniture hardware. Conspicuous in its absence is any type of arms or ammunition.

The assemblage was compared to the Carolina Artifact Pattern as defined by South (1977). The Carolina Artifact Pattern is based on quantification of the artifact assemblage and basically monitors domestic behavior. Aberrancies in an assemblage in relation to the Carolina Artifact Pattern should indicate behavior outside the realm of normal domestic activities at a site (South 1977; Honerkamp 1980). The Fish Haul assemblage is quite comparable with the Carolina Artifact Pattern, suggesting that it represents a domestic assemblage (Table 4).

Ceramic	
Whiteware, plain	32
Whiteware, shell edged	17
Whiteware, annular	8
Whiteware, hand painted	3
Whiteware, transfer printed, blue	8
Whiteware, transfer printed, other	5
Colono ware	6
Glass	
Green bottle	5
Clear bottle	1
Brown bottle, molded	4
Clear bottle, panel	1
Window	1
Iron	
Nail	2
Key	1
Kettle fragment	1
Button	1
Furniture hardware	1
Brass	
Button	1
Kaoline	
Pipestem	2
Total	100

Table 3. Quantification of the Fish Haul historic assemblage.

	Fish Haul %	Carolina Pattern %
Kitchen		
Ceramics	79.00	
Dark bottle glass	9.00	
Pharmaceutical glass	2.00	
Iron kettle	1.00	
Subtotal	91.00	63.10
Architectural		
Nails	2.00	
Window glass	1.00	
Subtotal	3.00	25.50
Furniture		
Handle ?	1.00	.20
Arms	.00	.50
Clothing		
Brass button	2.00	3.00
Personal		
Key	1.00	.20
Tobacco Pipe	2.00	5.80
Activities	.00	1.70

Table 4. Comparison of the Fish Haul assemblage to the Carolina Artifact Pattern.

There are several interesting aspects to the kitchen group of this assemblage, however. Although the ceramic assemblage forms a large percentage of the kitchen group, as expected, it is comprised almost entirely of tablewares. Conspicuous in their absence are the utilitarian wares used for the preparation and storage of food (Table 5). The exception to this are the iron pot fragment and,

	#	%
Plate or Saucer	23	65.7
Bowl or Cup	5	14.3
Chamber Pot	1	2.9
Utilitarian Vessel	6	17.1
	35	100.0

Table 5. Quantification of identifiable ceramic vessel forms.

possibly, the six sherds of Colono ware. Historical sources indicate that the inhabitants of Mitchellville were serviced from communal kitchens and wash houses (Carse 1961:91). This fact would help explain the lack of food preparation or storage wares at certain areas of the site.

The presence of Colono pottery as the only utilitarian ware adds a tantalizing piece of information to the study of this ceramic type. Colono ware was traditionally believed to be present on Anglo-American and Afro-American sites as a result of Indian trade. The presence of this ware in quantity on eighteenth and early nineteenth century plantation sites (Drucker and Anthony 1979) and, more recently, on urban sites (Zierden et al. 1982) led archaeologists to suggest that this ware may be the product of black slaves (Ferguson 1980). Since Ferguson's preliminary paper, however, no major study of Colono ware has been published; therefore, the question is far from answered. The presence of this ware as the only utilitarian ware in the assemblage, plus its association with a mid-nineteenth century assemblage which contains no earlier materials, strongly suggests that these vessels, at least, were the product of the freedmen of Mitchellville.

The site of Mitchellville presents an excellent opportunity to study the effects of sudden freedom and other rapid changes on Afro-American culture. Only one other such study has been conducted on the southeastern Atlantic coast (Singleton 1979). Data from Mitchellville and Hilton Head Island, the home of numbers of newly-freed blacks during and immediately after the Civil War, should provide important information on this subject.

Ethnobotanical Remains

Ethnobotanical studies were conducted on 11 hand-picked samples and one waterscreened collection from Fish Haul. The hand-picked specimens usually provide little information on subsistence as they primarily represent wood charcoal large enough to be readily collected. These samples, however, may provide ecological data through examination of the wood species present. While wood charcoal probably gives a fair indication of the trees in the site area at the time of aboriginal occupation, there are several factors which may bias any environmental reconstruction based solely on charcoal evidence. These biases include selective gathering by the Indians and differential self-pruning of the trees.

The wood charcoal was examined under low magnification and identified, when possible, to the species level using comparative samples and Panshin and de Zeew (1970). Specimens were broken in half to expose a fresh transverse surface. The results of this analysis are shown in Table 6.

Pine (*Pinus spp.*) is the most common wood charcoal, although several samples show considerable diversity, with oak (*Quercus spp.*), holly or yaupon (*Ilex sp.*), cedar (*Juniperus virginiana*), ash (*Fraxinus sp.*), and willow (*Salix sp.*) identified. In addition, several unidentifiable specimens, including a hardwood, were examined. Several specimens also contained small quantities of rosin.

The willow (either black willow or swamp willow) grows best in wet areas and flourishes at or slightly below the water table. The swamp willow (*Salix caroliniana*) is usually found on the margins of freshwater ponds and is peripheral to forests. The willow, however, will easily stagnate and will not succeed itself naturally. The ash may be either the water ash, which required low swamps, or the white ash, which is less common on the coastal plain but is found in dry, rich soils. Ash is a pioneer species which is later intolerant of shade and is considered characteristic of the early stages of natural succession. The cedar, also a pioneer species, is usually found on sandy soils and is somewhat salt tolerant. Pines are subclimax and will usually be replaced by understory hardwoods. They will grow on a variety of soils. The oaks, also found on a variety of soils, are usually a climax species. The carbonized *Ilex* wood may represent any one of at least five species commonly found on the coastal plain. Most, however, are found on low, swampy soils and yaupon (*Ilex vomitoria*) is common in the shrub layer of maritime forests. These species may represent aboriginal exploitation of a variety of ecotones, but there is a noticeable absence of hickory, which is usually associated with the drier soils of the oak-pine association, and palmetto, which is not expected to be an important fire wood. The presence of several pioneer species and the subclimax pine species suggest aboriginal use of a disturbed environment.

In addition to wood charcoal identification, charcoal from Feature 2, south half, hand-picked from the waterscreening, was examined. A total of 7.56 g was examined, of which 7.30 g (96.6%) consists of wood charcoal. The remaining 0.26 g (3.4%) is composed of hickory nutshells (*Carya sp.*).

	Pinus sp.	*Quercus sp.*	*Ilex sp.*	*Juniperus virginiana*	*Fraxinus sp.*	*Salix sp.*	hardwood	unident. wood	rosin
80R100, level 2	X	X	X	X	?				
80R100, level 3	X					X			X
90R100, level 2	X						X		
100R100, level 3	X	X						X	X
100R100, level 4	X[a]								
TP 1, level 4								X[a]	
TP 2, level 3	?								X
Feature 1	X								
Feature 2, N½	X								
Feature 2, N½	X								

[a] probable root

Table 6. Wood charcoal identification.

		Sample Components					Plant Foods	
	Sample weight	Pottery	Debris	Shell	Wood Charcoal	Plant Food	Hickory	Seeds
Fea. 2, N½ (by weight)	43.56 g	0.67	2.77	3.00	33.31	3.78	3.45	0.33
Fea. 2, N½ (by percent)	43.56 g	1.5	6.4	6.9	76.5	8.7	7.9	0.8

Table 7. Analysis of waterscreened ethnobotanical sample from Fish Haul.

The entire waterscreened sample from Feature 2, north half, was examined. The sample was sifted through a series of 10 screens. Each fraction was weighed and the first five fractions were entirely examined and sorted under low magnification (7 to 30x). Remains from these five fractions were quantified by weight. The quantities of plant remains below the fifth screen were extrapolated on the basis of the quantities determined for the first five screens (this procedure basically follows Yarnell 1974). The results of this analysis are found in Table 7. Over 76% of the sample is wood charcoal and only 8.7% of the sample is plant food or food remains. Although one unidentified seed was found, the predominant plant food remains recovered are hickory nutshells.

Comparative data are sparse, consisting of ethnobotanical analysis from three Thom's Creek Phase coastal sites (Trinkley 1976c) and one Stallings site (Trinkley 1974). In the Stallings Phase site, wood charcoal accounts for 86.5% of the total sample with hickory nutshell accounting for 11.7%. No acorn was recovered. The Thom's Creek Phase samples are similar, with wood charcoal ranging from 24 to 81% and averaging 55.6%. Hickory and acorn shells are found, although the acorn rarely accounts for more than 1% of the total sample. Hickory nutshells, however, account for up to 25% of some samples and average 7.8%. Hickories are fairly dependable with masts occurring every 2 to 3 years and are available from October through December. Acorn crops are less dependable and the Indians would have been in competition with a number of other animals for this food. The hickory provides high quantities of protein and fat and have a caloric value equal to that of most meats (Asch et al. 1972; Hutchinson 1928:261). The acorn, while low in protein and fat, is high in carbohydrates (Asch et al. 1972).

Although there are too few data, it is tempting to suggest that the Early Woodland coastal populations commonly used hickory nuts while declining to use acorns. This speculation, however, must be weighed against Yarnell's (1974:119) caution that acorn shell is lighter in weight and more fragile than hickory. Consequently, to derive a food equivalence of acorn to hickory, the acorn shell recovered must be multiplied by a factor of 10 to 20. The absence of acorn (in contrast to the presence of hickory) in the two available samples may be simply the result of sampling error. An alternate explanation is that the acorns were less attractive to the Indians than the hickory nuts because of the more difficult preparation of acorns and the greater competition for the acorn crop. Involved in this decision may also have been scheduling priorities, as the hickory and acorn are both available at the same time.

Shellfish

Fragments of shellfish are found in all levels of the Fish Haul excavation, but are generally uncommon. The primary exception to this are the quantity of shells recovered from Feature 2, presumably redeposited garbage from a single steaming episode. A total of 295 identifiable shells or shell fragments, with a total weight of 2.5 kg, are recovered from this feature. Six species are identified: common oyster (*Crassostrea virginica*), quahog (*Mercenaria mercenaria*), ribbed mussel (*Modiolus demissus*), common cockle (*Trachycardium muricafum*), stout tagelus

(*Tagelus plebeius*), and the marsh periwinkle (*Littorina irrorata*). The oyster accounts for 84% of the shell by weight, followed by clam (12%). The other species, combined, account for 4% of the feature shell by weight. From a caloric viewpoint, the shellfish in the feature are estimated to have contributed 1.3 kilocalories with the oyster contributing 82% of the total.

Shellfish are perhaps the most abundant subsistence resource in the coastal zone. Vernberg and Sansbury (1972:275) note that the common pelecypod mollusk in the Port Royal area is the oyster and the beds in the Beaufort area produce approximately 200 oysters per square yard, of which 39% are over 3-inches in length (Bearden and Farmer 1972:211). Quahogs, in less dense bed areas, have an average density of about two per yard, while ribbed mussels have a maximum density of about 10 per yard (Vernburg and Sansbury 1972:275-276).

An examination of the preferred habitats of the six dominant shellfish species suggests that they will be found in three relatively distinct areas. Periwinkles are commonly found migrating up and down *Spartina* in rhythm with the tide, in the higher regions of the marsh, near substrate. The oyster has fairly specific requirements which cannot be met in a great number of locations, although in the Port Royal area today there are about 2150 acres of intertidal oyster beds (Bearden and Farmer 1972:210). Oyster beds, because of their dense mass of shell and hard bottom, are not a likely habitat for many other mollusks, although ribbed mussels may be found mingled with clusters of oysters. While not found in Feature 2, several specimens of whelk were collected from Fish Haul. Whelks are preditors of oysters and may be found localized on oyster beds. Otherwise the whelk will be found in shallow water on sandy bottoms. Finally, the other species, particularly the quahog, stout tagelus, and ribbed mussel, will be most frequently found shallowly burrowed into a mud-sand intertidal beach area. The quahog is found just below the surface of the tidal flat, occurring in concentrations within restricted areas. While the oyster has a fairly wide latitude of salinity tolerances, the quahog is limited to those areas having a salinity higher than 20 ppm, reflecting its more subtidal nature (Larson 1969:123; Chestnut 1951). The stout tagelus is similar to the clam in that it will be found in the intertidal zone burrowed into the bottom, but the ribbed mussel will be only partially buried in the mud.

Shellfish gathering therefore appears to have utilized these mutually exclusive intertidal areas, with the oyster beds or flats being most important. Whelks were probably procured incidental to gathering oysters. The collection from Fish Haul resembles collections from other Early Woodland coastal sites in both the size and proportion of the specimens.

Clam shells from Feature 2 provide data on the season of the kill, which allows speculations to be made on seasonal occupation (see Clark 1979; Claassen 1982). In brief, the clam exhibits microscopic annual stress lines which appear as zones of relatively transparent shell and which are the equivalent of annual growth lines. These annual growth lines are correlated with the environmental stress of the summer season

in this area and on examination of the lip of a thin sectioned shell will reveal the season of death.

Of the four shells sent to Claassen for analysis, three were killed during a period of fast growth, suggesting collection from February through April, based on her North Carolina growth profile. Similar winter collections are reported by Claassen (1982) for North Carolina coastal sites and by Trinkley (1981:60) for the Early Woodland component at Pinckney Island.

Faunal Remains

The faunal analysis, conducted by Reitz, will be considered in two parts: first, those Early Woodland remains recovered from Feature 2, and second, those historic remains obtained from the shell midden in Test Pit 2. In both cases, however, the sample size is very small and no conclusions can be drawn realistically. This study does indicate that faunal remains are present in relatively good condition and also indicates the direction of future research.

From the southern half of the Stallings phase shell pit designated Feature 2, 18 bone fragments were recovered. These remains represent a near complete sample, as this feature fill was waterscreened through ¼-inch mesh. No faunal remains were found in the northern half, although not all of this portion was waterscreened. The total weight of the sample is 4.45 g and the identifications are provided in Table 8. Mammal remains, possibly deer, account for 67.4% of the specimens by weight, followed by turtle (24.7%), birds (4.4%), and fish (3.3%). If the allometric formulae offered by Wing and Brown (1979) and by Fradkin (1979) are used to compute the live meat weight represented by the bones recovered somewhat different percentages are obtained, although the relative importance of the sources remains the same. Mammals contribute 81.1% of the total, turtles account for 8.1%, birds for 6.6%, and fish contribute 4.1% (using the Wing and Brown [1979:128] formulae for mammals and birds, and the Fradkin [1979:80] formulae for turtles and fish).

	# fragments	wt (g)	MNI
Unidentified mammal	2	3.00	1
Unidentified bird	1	0.10	-
Passeriformes	1	0.10	1
Unidentified turtle	8	1.10	1
Unidentified fish	4	0.10	-
Mugil spp.	2	0.05	1
	18	4.45	4

Table 8. Faunal remains from Feature 2, south half.

Little can be said concerning the Fish Haul faunal assemblage. In the most general sense it agrees with the analyses available from Lighthouse Point, an Early Woodland shell ring in Charleston County, where mammals contributed 83 to 86% of the meat and fish 7 to 12%. The sparseness of the remains, when compared to the later shell ring sites,

however, is noticeable. Reitz (1982:81) has noted that mullet is commonly found in coastal collections, although it is unclear whether this reflects a cultural practice or a sampling bias. Mullet, being a schooling species, are best collected using nets, weirs, or traps (Reitz 1982:80). Trinkley (1980:111) has suggested that such fish may have been collected as they migrate in and out of small estuaries with the tide.

The specimens from Feature 2 show little modification according to Reitz (Elizabeth Reitz, personal communication), although several are eroded and the mammal bone has been gnawed prior to deposition, probably by a dog. Faunal remains at Fish Haul probably will be best preserved in feature contexts, particularly if shell remains are also present.

A total of 43 bone fragments are available for analysis from the nineteenth century midden in Test Pit 2, level 1. While representing a larger collection than the prehistoric sample, these remains were collected from ½-inch dry mesh screening and may therefore seriously underrepresent small species such as fish and birds. The identified remains are listed in Table 9. Based on bone weight the catagory of unidentified mammal is the most significant, accounting for 42.6% of the total. Following in significance is pig, which contributes 26.9% of the total bone weight and Artiodactyls (hoofed mammals of the order Artiodachyla) which contribute 17.6%. The cow contributes a surprisingly low 1.6% to the total sample by bone weight. Turtle, the only definitely wild species, accounts for the remaining 11.3% of the sample. The turtle catagory includes unidentified turtle, the eastern chicken turtle, and the family Emydidae (commonly known as box turtles and cooters). The eastern chicken turtle and the cooter are inclined to occupy impoundments of fresh water while the box turtle is a terrestrial species (Sandifer et al. 1980:134-135, 353).

	# fragments	wt (g)	MNI
Unidentified mammal	21	39.7	-
Artiodactyl	1	16.4	-
Sus scrota	6	25.1	1
Bos taurus	1	1.5	1
Unidentified turtle	4	2.1	-
Emydidae	9	7.6	-
Deirochelys reticularia	1	0.9	1
	43	93.3	3

Table 9. Faunal remains from Test Pit 2, level 1, historic midden.

These remains are generally in better condition than those from the Stallings occupation. Four of the mammal bones have been gnawed, probably by dogs, and one has been cut by a steel blade. No evidence of saw marks was found. If, as suspected, this midden is associated with the freedmen "village" at Mitchellville, there is the potential, with additional work and a larger sample, to study how diet varied with the change from slave to freedman status.

SUMMARY AND RECOMMENDATIONS

The Importance of the Site

The excavations at Fish Haul Creek present a unique opportunity to examine a variety of Early Woodland research questions. This uniqueness is primarily the result of the nature of the site. The Stallings occupation zone is effectively sealed under at least 1 foot of relatively sterile soil, insuring site integrity. The site has received only minimal effects from cultivation, logging, and historic occupation. As evidence of this is the recovery of a large quanity of Stallings pottery from Feature 1, much of which is restorable. The site also contains easily definable features and postholes, in spite of its antiquity, sandy matrix, and general absence of shell. These features have the potential to provide information on subsistence and intra-site patterning. The Stallings zone, which is up to 1.5 feet thick, has sufficient depth to allow studies of change through time, unlike sites with very thin or very disturbed middens. Finally, shell-less Stallings sites are relatively uncommon, probably because they are more difficult to recognize than shell middens. Sites such as Fish Haul are found usually by accident, such as through deep commercial excavations, or rarely through archaeological testing beneath shell midden zones, such as at Pinckney Island (Trinkley 1981). These factors combine to suggest that the Fish Haul site is significant and deserves additional study.

The artifacts from the Stallings zone are generally those frequently associated with Stallings sites; although these studies have contributed new knowledge. For the first time the presence of Stallings abraders has been documented. While the sample size is very small, it is probable that some were used to shape and polish bone tools. Similar abraders are found in the succeeding Thom's Creek, Refuge, and Deptford sites, which suggests a continuation of artifact form, if not function, through the Early Woodland. Additional examples of abraded Stallings sherds need to be recovered to assist in functional studies. Red pigment, similar to that found on Thom's Creek sherds, is found on at least one Stallings sherd. While the nature and function of this pigment is not presently known, it also suggests a pattern continuing at least through the Thom's Creek Phase. With more careful laboratory techniques pigment or slips may be found to occur on at least a noticeable minority of Early Woodland vessels.

This artifact analysis also suggests the closeness of Stallings and Thom's Creek pottery based on a similar sequence of development through time. Limited stratigraphic evidence is found to suggest that plain Stallings pottery is followed by reed punctate and finally by shell punctate Stallings vessels. By extension the small quantity of Stallings Finger Pinched pottery found at sites such as Chester Field must be very late in the Stallings continuum and must correlate with the abundance of Thom's Creek Finger Pinched pottery found at shell rings

from Charleston northward. This sequence is identical to that identified for the Thom's Creek Series, although additional work must be conducted to verify and refine these tendencies.

In a similar manner the Small Savannah River Stemmed projectile point found at Fish Haul, coupled with the less well analyzed specimens from other sites, tend to support the sequence of point size reductions established by Oliver (1981). Additional research at Fish Haul may produce similar points in a datable context.

Fish Haul offers the potential to effectively deal with settlement and subsistence questions. The single excavated feature contains ethnobotanical, shellfish, and faunal remains. Each category is capable of providing not only subsistence data, but also information on seasonality. The only plant food remains found are hickory nutshells, which fit a pattern of limited floral dependence observed at other Early Woodland sites. Additional work, however, is necessary to support this pattern. Shellfish are also relatively unimportant at this site, as they are found only in a feature context and not as a midden. The species identified are common to other coastal Early Woodland sites and represent exploitation of several marsh areas with an emphasis on the tidal oyster flats. Faunal remains are also sparse and represent hunting of mammals and collection of generally small fish. The species are common to other Early Woodland sites, but the lack of diversity is noticeable. The subsistence remains suggest a limited reliance on all sources, which in turn suggests short-term occupation of the site. The presence of features and postholes does not, of necessity, contridict this assessment. Shellfish, based on later Thom's Creek sites, were commonly steamed open; this steaming is probably the quickest and easiest method of using this abundant coastal resource. Consequently, the presence of pits is expected even at temporary camps. The postholes may reflect the construction of temporary windbreaks or shelters. From the Stallings zone at Pinckney Island a fired mud dauber's nest showing wood grain at the point of attachment provides evidence that at this site the Stallings occupants constructed some sort of structures (Trinkley 1981:52). Further research at Fish Haul will not only provide better subsistence collections, but may also reveal intra-site variation, including distinct posthole patterns.

Seasonality reconstructions at Fish Haul are based on a very few data and a larger sample is required for better accuracy. Present data, however, support a winter occupation, paralleling the assessment of the Pinckney Island collection (Trinkley 1981:60-61). The presence of hickory is suggestive of a collection period no earlier than October, but possibly lasting into January or February. Storage beyond February is also possible. The clam shells indicate a late winter death, from February to no later than April. The faunal remains are equivocal, but with additional work they also have the potential to contribute to a fuller understanding of seasonality.

Fish Haul also may represent a temporary camp, occupied at various seasons. Such a conclusion, however, is dependent on additional data. Ultimately it is essential to fit Fish Haul into a larger understanding of Early Woodland Stallings Phase settlement and scheduling.

Included in this problem is not only understanding the differences between non-shell midden sites, such as Fish Haul and Pinckney Island, and shell midden sites, such as Chester Field; but also understanding the relationship of coastal sites to Savannah River drainage sites, which include both shell middens, such as the Cox Site, and upland sites, such as the Love Site (Trinkley 1974).

These investigations have indicated that Fish Haul is capable of contributing significant archaeological data to a variety of prehistoric questions, including the development of Stallings culture along the southern coast of South Carolina. The site is also significant for the historical data it contains, although these preliminary investigations have not concentrated on that aspect of the archaeology. Briefly, the nineteenth century midden along the edge of Fish Haul Creek can provide data useful to the study of the turbulent events surrounding the sudden freedom of the Hilton Head slaves. The midden, which we believe is associated with Mitchellville, offers the potential of better understanding the lifestyle of the freedmen during the period during and immediately after the Civil War. Of great significance is the potential to study and compare antebellum and post-bellum lifestyles of black slaves (see Singleton 1979).

Future Work

Upon the request of Crago and Weckhorst we are including our recommendations for future work at Fish Haul. This preliminary work has verified the importance of the site and indicated the types of research questions which may be answered by additional, intensive work. Both the prehistoric and historic components of the Fish Haul site appear to be eligible for inclusion in the National Register of Historic Places.

If work continues on the Fish Haul subdivision important archaeological information will be destroyed. The additional research we propose represents a minimal effort at collecting the significant data prior to its destruction. Additional work could be conducted and there are different approaches to the same result; however, we believe that the outlined staged approach will be the most cost effective and will provide the best control over data collection.

The first stage, to be conducted by Zierden, includes archival research of the Fish Haul Plantation. This data will utilize numerous South Carolina sources, including the South Carolina Department of Archives and History, the South Caroliniana Library, the South Carolina Historical Society, and the Charleston Library Society. Preliminary research also indicates that the National Archives may contain significant information, principally in the records of the War Department (Record Group 98), Engineer Department - Cartographic Records (Record Group 77), and Interior Department - Military Reservation Files (Record Group 49). We anticipate 15 days will be required for this archival review. This information, in turn, will assist in a more complete understanding of the nineteenth century midden along Fish Haul Creek and may provide detailed Civil War maps of the area.

The second stage, to be conducted by a field crew of six archaeologists, involves a more thorough testing of the 8.5 acre development area. We propose a 0.5% sampling fraction with the tests randomly distributed over the development. Test units will be 5-foot squares dug by hand to sterile soil. The proposed sampling fraction would require excavation of 74 test units and is expected to take 25 days of fieldwork. This approach will assist in delimiting site boundaries and will provide unbiased data on the entire development. Based on this sampling strategy it will be possible to isolate the areas of highest prehistoric and historic sensitivity. These areas will become the object of the following two stages.

The third stage, still using a crew of six archaeologists, is the excavation of a large block in the heart of the Stallings area. We propose opening an area about 40 by 50 feet, or the equivalent of 20 10-foot squares. The purpose of such a large area is to more fully explore intra-site patterning in order to observe activity areas and detect, if possible, different episodes of occupation. A large excavation unit will also assist in defining features. Level 1 will be removed mechanically, with all subsequent excavation by hand. It is expected that 30 field days will be required for this work, including the excavation of observed features.

The fourth stage involves the excavation of the historic component, probably along the bluff in the vicinity of the nineteenth century shell midden. We propose opening a block unit of about 30 by 40 feet, or the equivalent of 10 10-foot squares. All work will be by hand excavation and is expected to require 20 field days.

The fifth and final stage involves the analysis and preparation of a report by Zierden and Trinkley. This stage, essential to maintain the integrity of the site and disseminate the results, is expected to require, minimally, 90 days.

In sum, the proposed work for Fish Haul entails 15 days of funded archival research, 75 days of funded field excavation, and 90 days of analysis and report preparation (45 of which must be funded). The 75 days of field research may be translated into 450 person days, using a crew of six archaeologists. Additionally, funding will be required for lodging, rental of heavy equipment, expendible field supplies, photographic supplies and processing, radiocarbon dating, soil analysis, processing of the recovered specimens, and clerical labor.

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